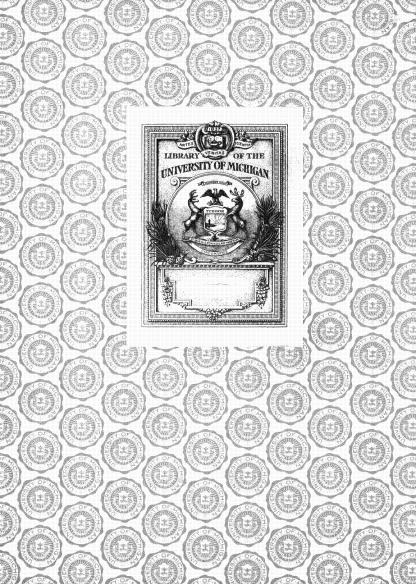
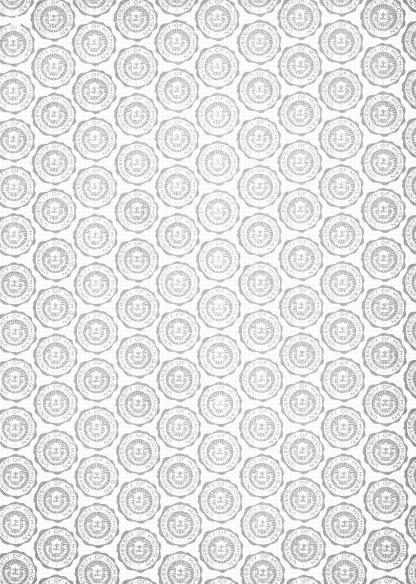
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# CHECK-LIST OF THE SPECIES OF FISHES KNOWN FROM THE PHILIPPINE ARCHIPELAGO

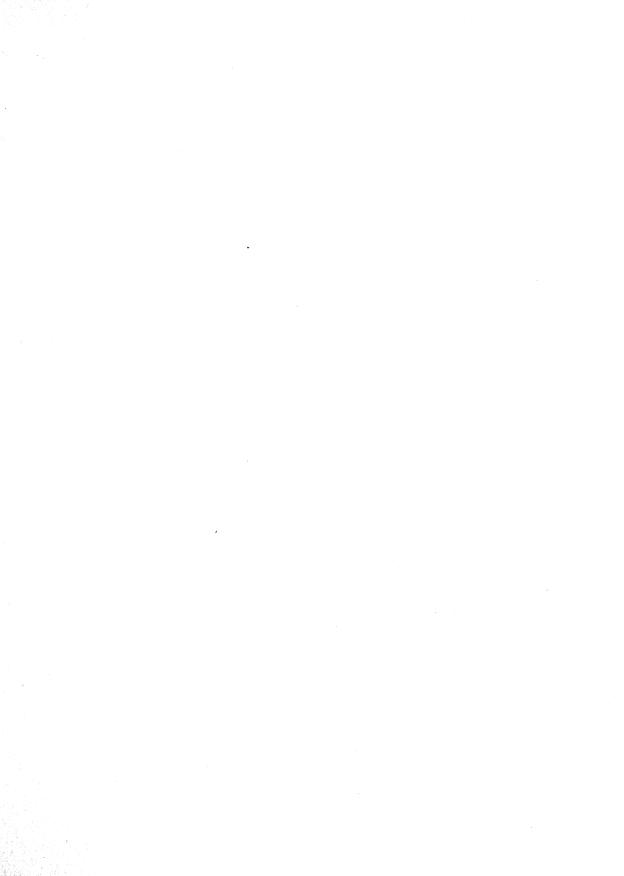
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DAVID STARR JORDAN  $_{\text{AND}}$  ROBERT EARL RICHARDSON



MANILA BUREAU OF PRINTING



# CHECK-LIST OF THE SPECIES OF FISHES KNOWN FROM THE PHILIPPINE ARCHIPELAGO

BY

# DAVID STARR JORDAN $_{\text{AND}}$ ROBERT EARL RICHARDSON



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# CHECK-LIST OF THE SPECIES OF FISHES KNOWN FROM THE PHILIPPINE ARCHIPELAGO.

By DAVID STARR JORDAN and ROBERT EARL RICHARDSON.

In the present paper is given a list of all species of fishes positively known at the date of January 1, 1909, as inhabiting the waters of the Philippine Archipelago. A complete bibliography of the ichthyology of the Philippines is given in the Appendix.

The writers are indebted to Mr. Alvin Seale and to Mr. Richard Crittenden McGregor for important aid on the preliminary work of the preparation of this catalogue; 830 species are included, a large number, which probably represents less than half of the actual fish fauna of these Islands.

### INTRODUCTION.

The list has been drawn up without reference to the lists of Elera, Gogorza, and Palacky (noted in the bibliography). A list of those species of Palacky's catalogue which are known on no other authority than that of Palacky, Elera, or Gogorza, is appended at the conclusion of the present check-list. In the present list the full reference to the original description is given in case only of those species not noticed or described in Günther's Catalogue of the Fishes of the British Museum. In the record of geographical distribution which follows the name of each species admitted to the check-list, the name by which the species was designated by an author is given only in case the specific name used was different from the one here employed.



# Class SELACHII.

# Family ORECTOLOBIDÆ.

# CHILOSCYLLIUM Müller & Henle.

1. Chiloscyllium indicum (Gmelin). Manila (Günther, A).

Family CARCHARIIDÆ.

SCOLIODON Müller & Henle.

- 2. Scoliodon walbeehmii (Bleeker). Manila (Jordan & Richardson).
- 3. Scoliodon acutus (Rüppell). Manila (Jordan & Seale, A).

# Family SPHYRNIDÆ.

# SPHYRNA Rafinesque.

4. Sphyrna zygæna (Linnæus). Cavite (Jordan & Seale, A).

Family RHINOBATIDÆ.

### RHYNCHOBATUS Müller & Henle.

5. Rhynchobatus djiddensis (Forskål). Cavite (Jordan & Seale, A).

# Family DASYATIDÆ.

# DASYATIS Rafinesque.

6. Dasyatis kuhli (Müller & Henle). Philippine Islands (Jordan & Seale, A);
Zamboanga (Seale & Bean).

### HIMANTURA Duméril.

7. Himantura uarnak (Forskål). Manila (Jordan & Richardson).

### TÆNIURA Müller & Henle.

8. Tæniura lymma (Forskål). Zamboanga (Seale & Bean).

# Family AËTOBATIDÆ.

# STOASODON Cantor.

9. Stoasodon narinari (Euphrasen). Cavite (Jordan & Seale, A).

# Class PISCES.

# Family ELOPIDÆ.

### ELOPS Linnæus.

Elops hawaiiensis Regan. Manila (Jordan & Richardson); Bulan (Evermann & Seale, A) (as E. saurus).

# Family MEGALOPIDÆ.

### MEGALOPS Lacépède.

11. Megalops cyprinoides (Broussonet). Luzon (Peters, c); Negros (Jordan & Seale, B); Bulan (Evermann & Seale, A).

# Family CHIROCENTRIDÆ.

### CHIROCENTRUS Cuvier.

12. Chirocentrus dorab (Forskål). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); Mindanao (Smith & Seale); Bacon (Evermann & Seale, A).

# Family CHANIDÆ.

### CHANOS Cuvier.

Chanos chanos (Forskål). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); Manila (Evermann & Seale, B). Zamboanga, Seale & Bean.

# Family CLUPEIDÆ.

# STOLEPHORUS Lacépède. (Spratelloides Bleeker.)

- 14. Stolephorus gracilis (Temminck & Schlegel). Bacon (Evermann & Seale, A); (?) Negros (Jordan & Seale, B, Stolephorus japonicus; see note in Evermann & Seale, A).
- 15. Stolephorus delicatulus (Bennett). Bulan (Evermann & Seale, A).

### DUSSUMIERIA Cuvier & Valenciennes.

- 16. Dussumieria acuta Cuvier & Valenciennes. Manila (Kner).
- Dussumieria elopsoides Bleeker. Cavite (Jordan & Seale, A); Iloilo (Jordan & Richardson).
- 18. Dussumieria hasseltii Bleeker. Manila (Jordan & Richardson).

### AMBLYGASTER Bleeker. (Sardinia Poey.)

- 19. Amblygaster sirm (Rüppell). Negros (Jordan & Seale, B).
- 20. Amblygaster clupeoides (Bleeker). Negros (Jordan & Seale, B); Bulan (Evermann & Seale, A).
- 21. Amblygaster perforatum (Cantor). Bacon (Evermann & Seale, A).

# SARDINELLA Cuvier & Valenciennes. (Harengula Cuv. & Val).

- 22. Sardinella moluccensis (Bleeker). Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Manila (Jordan & Richardson); Bacon; Bulan (Evermann & Seale, A); Zamboanga, Seale & Bean.
- 23. Sardinella gibbosa (Bleeker). Philippine Islands (Jordan & Seale, A);
  Manila (Jordan & Richardson).
- 24. Sardinella sundaica (Bleeker). Negros (Jordan & Seale, B); Manila; Aparri; Iloilo (Jordan & Richardson).
- 25. Sardinella vanicoris Jordan & Seale. Zamboanga (Seale & Bean) as Clupea melanura, not of Cuvier.

### ILISHA Gray.

26. Ilisha hœvenii (Bleeker). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A).

# Family DOROSOMATIDÆ.

### ANODONTOSTOMA Bleeker.

27. Anodontostoma chacunda (Hamilton-Buchanan). Cavite (Jordan & Scale, A, var. selangkat); Negros (Jordan & Scale, B); Manila; Iloilo (Jordan & Richardson); Mindanao (Smith & Scale); Bacon (Evermann & Scale, A).

# KONOSIRUS Jordan & Snyder.

28. Konosirus thrissa (Osbeck). Philippine Islands (Günther, Evermann & Seale, A); Zamboanga (Seale & Bean). (Dorosoma nasus (Bloch).)

# Family ENGRAULIDÆ.

### ANCHOVIA Jordan & Evermann.

- 29. Anchovia commersoniana (Lacepède). Manila (Jordan & Seale, A); Negros (Jordan & Seale, B).
- 30. Anchovia hamiltoni (Gray). Cavite (Jordan & Seale, A); Manila; lloilo (Jordan & Richardson).
- 31. Anchovia bœlama (Forskål). Cagayancillo; Iloilo (Jordan & Richardson); Mindanao (Smith & Seale). Zamboanga (Seale & Bean).
- 32. Anchovia indica (Van Hasselt). Cavite (Jordan & Seale, A); Bulan (Evermann & Seale, A).
- 33. Anchovia setirostris (Broussonet). Aparri (Jordan & Richardson).

# Family SYNODONTIDÆ.

### TRACHINOCEPHALUS Gill.

34. Trachinocephalus myops (Forster). Bulan (Evermann & Seale, A).

# SYNODUS Gronow.

35. Synodus japonicus (Houttuyn). Cuyo (Jordan & Richardson); Bulan; Bacon (Evermann & Seale, A, Synodus varius).

### SAURIDA Cuvier & Valenciennes.

- 36. Saurida gracilis (Quoy & Gaimard). Manila (Jordan & Seale, A); Cuyo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 37. Saurida argyrophanes Richardson. Cavite (Jordan & Seale, A, Saurida japonica); Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A).
- 38. Saurida badi (Cuvier). Negros (Jordan & Seale, B).

# Family ALEPOCEPHALIDÆ.

### BATHYTROCTES Günther.

39. Bathytroctes macrolepis Günther. Sta. 198, north of Celebes (Günther, B). (Bathytroctes macrolepis Günther, Deep Sea Fishes Challenger, p. 225, pl. LVII, fig. B; Sta. 198, north of Celebes.)

# Family MALACOSTEIDÆ.

# MALACOSTEUS Ayres.

40. Malacosteus indicus Günther. Sta. 214, near Philippine Islands (Günther, B). Malacosteus indicus Günther, Ann. Mag. N. H., II, 1878, 181.

# Family MYCTOPHIDÆ.

### MYCTOPHUM Rafinesque.

41. Myctophum gilberti Evermann & Seale. Bulan (Evermann & Seale, A).

Myctophum gilberti Evermann & Seale, Bull. U. S. Fish Comm., XXVI,
1906, 55, fig. 1; Bulan, P. I.

### LAMPADENA Goode & Bean.

42. Lampadena engraulis (Günther). Sta. 200, Philippine Islands (Günther, B).

Scopelus engraulis Günther, Deep Sea Fishes Challenger, p. 197, pl. LI, fig. C; Sta. 200, Philippine Islands.

# NANNOBRACHIUM Günther.

43. Nannobrachium nigrum Günther. Sta. 214, south of Philippines. (Günther, B).

Nannobrachium nigrum Günther, Deep Sea Fishes Challenger, p. 199, pl. LII, fig. B; Sta. 214, south of Philippines.

# Family STERNOPTYCHIDÆ.

### POLYIPNUS Günther.

44. Polyipnus spinosus Günther. Sta. 200, between Philippine Islands and Borneo (Günther, B).

Polyipnus spinosus Günther. Deep Sea Fishes Challenger, p. 170; Sta. 200, between Philippine Islands and Borneo.

# STERNOPTYX Hermann.

45. Sternoptyx diaphana Hermann. Sta. 214, Philippine Islands (Günther, B).

### Family EVERMANELLIDÆ.

# OMOSUDIS Günther.

46. Omosudis lowii Günther. Sta. 214, south of Philippine Islands (Günther, B).
Omosudis lowii Günther, Deep Sea Fishes Challenger, p. 201, pl. LII, fig.
C. C'; Sta. 214, south of Philippine Islands.

# Family HALOSAURIDÆ.

### HALOSAURUS Johnson.

47. Halosaurus medirostris Günther. Sta. 207, west of Philippine Islands (Günther, B).

Halosaurus medirostris Günther, Deep Sea Fishes Challenger, p. 239, pl. LIX, fig. C; Sta. 207, west of Philippines.

# Family SYMBRANCHIDÆ.

### SYMBRANCHUS Bloch.

48 Symbranchus bengalensis (McClelland). Philippine Islands (Günther); Luzon (Peters, C).

# Family ANGUILLIDÆ.

# ANGUILLA Thunberg.

- 49. Anguilla mauritiana Bennett. Philippine Islands (Günther); Tarlac (Evermann & Seale, A); Calayan; Mindoro (Jordan & Richardson); Manila (Bleeker, as Muræna maculata); Zamboanga (Seale & Bean).
- 50.Anguilla manillensis (Bleeker). Manila (Bleeker). May not be different from Anguilla mauritiana.

# Family LEPTOCEPHALIDÆ.

### LEPTOCEPHALUS Gmelin.

51. Leptocephalus brevicaudus Peters.

A species of uncertain standing, Leptocephalus (Diaphanichthys) brevicaudus Peters, Monatsber. Akad. Wiss. Berl., 1868, 275; Masbate, Luzon; a larva form of some conger eel.

# UROCONGER Kaup.

52. Uroconger lepturus Richardson. Manila (Jordan & Seale, A).

# Family MURÆNESOCIDÆ.

# MURÆNESOX McClelland.

53. Murænesox cinereus (Forskål). Philippine Islands (Günther; Richardson, A, (Congrus hamo); =Murænesox bagio fide Bleeker=cinercus) Manila (Jordan & Seale, A; Jordan & Richardson).

# Family MYRIDÆ.

# MURÆNICHTHYS Bleeker.

- 54. Murænichthys gymnopterus (Bleeker). Cavite (Jordan & Seale, A).
- 55. Murænichthys macropterus Bleeker. Negros (Jordan & Seale, B).
- 56. Murænichthys thompsoni Jordan & Richardson. Manila Bay (Jordan & Richardson).

Muranichthys thompsoni Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 237, 1908. Manila Bay.

# Family OPHICHTHYIDÆ.

# OPHICHTHUS Ahl.

- 57. Ophichthus cephalozonus Bleeker. Philippine Islands (Günther).
- 58. Ophichthus grandoculis (Cantor). Manila (Jordan & Richardson).

# CIRRHIMURÆNA Kaup.

This genus may be provisionally recognized for those ophichthyid eels which have the maxillary teeth in bands, the lips fringed, and the dorsal inserted over or behind the gill-opening.

- 59. Cirrhimuræna tapeinoptera (Bleeker). Cavite (Jordan & Seale, A);
  Manila (Jordan & Richardson).
- 60. Cirrhimuræna nectura (Jordan & Seale) Cavite (Jordan & Seale, A). Jenkinsiella¹ nectura Jordan & Seale, Bull. U. S. Fish. Comm., XXVI, 1906, 6, fig. 1; Cavite, P. I.

# PISOODONOPHIS Kaup.

- 61. Pisoodonophis cancrivorus (Richardson). Philippine Islands (Günther; Richardson, A); Manila; Cuyo (Jordan & Richardson).
- 62. Pisoodonophis macgregori Jordan & Richardson. Manila (Jordan & Richardson).
  - Pisoodonophis macgregori Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 238, 1908. Manila, P. I.

### LEIURANUS Bleeker.

63. Leiuranus lithinus Jordan & Richardson. Cuyo (Jordan & Richardson). Leiuranus lithinus Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 239, 1908. Cuyo, P. I.

### CŒCULA Vahl. (Dalophis Rafinesque.)

64. Cœcula mindora Jordan & Richardson. Mindoro (Jordan & Richardson).
Cœcula mindora Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 239, 1908. Mindoro, P. I.

# Family MORINGUIDÆ.

# MORINGUA Gray. (Aphthalmichthys Kaup.)

- 65. Moringua abbreviata (Bleeker). Negros (Jordan & Seale, B); Ticao (Jordan & Richardson).
- 66. Moringua lumbricoidea Richardson. Negros (Jordan & Seale, B).
- 67. Moringua macrocephala (Bleeker). Luzon (Peters, C).

¹ Microdonophis macgregori Jenkins (Bull. U. S. Fish. Comm. XXII, 1902, p. 422), the type of Jenkinsiella Jordan & Evermann, with lips fringed, maxillary teeth uniserial (fide Jenkins), and dorsal inserted far in advance of gill-openings seems to be congeneric with Ophichthys (Cirrhimurana) calamus Günther, from Australia. The orignal description of Cirrhimurana (Jenkinsiella) nectura (Jordan & Seale) erroneously states that the maxillary teeth are in a single series. A reëxamination of the type proves that they are in broad bands. Of the four species included by Dr. Günther in the subdivision Cirrhimurana, one, Ophichthys playfairii Günther, from Zanzibar, with the teeth in bands, the lips fringed, and dorsal commencing "a short distance behind angle of mouth," appears to be intermediate between Jenkinsiella (macgregori) and Cirrhimurana as above defined.

# Family MURÆNIDÆ.

### GYMNOTHORAX Bloch.

- 68. Gymnothorax punctatofasciatus Bleeker. Negros (Jordan & Seale, B).
- 69. Gymnothorax polyuranodon Bleeker. Palawan (Boulenger, A.).
- 70. Gymnothorax petelli (Bleeker). Calayan (Jordan & Richardson).
  - Muræna petelli Bleeker, Nat. Tijds., XI, 84, Java.--Günther, Cat. VIII, 1870, 105.
  - Gymnothorax petelli Bleeker, Atlas, Muræn.. 99, tab. XXXII, fig. 1.— Jordan & Seale, Bull. U. S. Fish Comm., XXV, 1905, 197; Samoa.
  - Murana interrupta Kaup, Apodes, 67, fig. 51, 1854; Red Sea.
  - Gymnothorax leucacme Jenkins, Bull. U. S. Fish Comm., XXII, 1902, 427, fig. 7. Honolulu.
  - Gymnothorax waialuæ Snyder, Bull. U. S. Fish Comm., XXII, 1902, 520, pl. 6; Waialua, near Honolulu.
- 71. **Gymnothorax richardsoni** (Bleeker). Reefs near Cebu (Günther, A); San Fabian (Evermann & Seale, A); Sibuyan (Jordan & Richardson).
  - Muræna richardsoni Bleeker, Nat. Tijds., III, 1852, 296; Wahai, Ceram, Padang, Sumatra.
  - Gymnothorax richardsoni Bleeker, Atlas Muræn. 100, pl. XLII, fig. 2.
  - Gymnothorax scoliodon Bleeker, l. c., 101, pl. XL, fig. 2.
  - Gymnothorax ceramensis Bleeker, Ned. Tijds. Dierk., I, 261 Ceram.—Atlas. Muræn., 101, pl. XXXIII, fig. 3.
  - (?) Muranophis lineatus Lesson, Voy. Coquille, 1830, 127, pl. II, fig. I; Oualan. (Figure very poor; probably not the same species.)
- 72. Gymnothorax flavomarginatus (Rüppell). Calayan (Jordan & Richardson).
- 73. **Gymnothorax philippinus** Jordan & Seale. Cavite (Jordan & Seale, A). *Gymnothorax philippinus* Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 7, fig. 2; Cavite, P. I.
- 74. Gymnothorax afer Bloch. Bacon (Evermann & Seale, A).
- 75. Gymnothorax litus (Richardson). Cuyo; Cagayancillo (Jordan & Richardson).
- 76. Gymnothorax pictus (Ahl). Samar (Peters, C); Negros (Jordan & Seale, B); Cagayancillo; Ticao (Jordan & Richardson).
- 77. Gymnothorax undulatus (Lacépède). Manila (Kner, Gymnothorax cancellatus).
- 78. Gymnothorax tile (Hamilton-Buchanan). Luzon (Peters, C).
- 79. Gymnothorax fimbriatus (Bennett) (G. isingleenoides Bleeker) Zamboanga (Seale & Bean).

### **ECHIDNA** Forster.

- 80. Echidna nebulosa (Ahl). Reefs of Cebu (Günther, A); Negros (Jordan & Seale, B); Calayan (Jordan & Richardson).
- 81. Echidna delicatula (Kaup). Negros (Jordan & Seale, B).
- 82. Echidna polyzona (Richardson). Calayan (Jordan & Richardson).
  - Murana polyzona Richardson, Voy. Sulphur, Ichth., III, 1845, 112, pl. 55, fig. 11-14; no loc.
  - Echidna zonophwa Jordan & Evermann, Bull. U. S. Fish Comm., XXII, 1902, 167; l. c. XXIII, pt. I, 1903, 109, pl. 21; Hawaii.
  - Echidna vincta Jenkins, Bull. U. S. Fish Comm., XXII, 1902, 429; Hawaii.
  - Echidna obscura Jenkins, Bull. U. S. Fish Comm., XXII, 1902, 430, fig. 11; Honolulu.

- Echidna psalion Jenkins, Bull. U. S. Fish Comm., XXII, 1902, 431, fig. 12; Honolulu.
- (?) Echidna leihala Jenkins, Bull. U. S. Fish Comm., XXII, 1902, 428, fig. 9. Honolulu.
- (?) Pœcilophis tritor Vaillant & Sauvage, Rev. et Mag. Zool. (3). III 287, 1875; Hawaii.

# UROPTERYGIUS Rüppell.

83. Uropterygius concolor Rüppell. Negros (Jordan & Seale, B).

# Family CYPRINIDÆ.

### BARBODES Bleeker.

- 83. (84). Barbodes quinquemaculatus (Seale & Bean). Zamboanga (Günther,) Mount Malindang, Zamboanga (Seale & Bean). (Barbodes maculatus var. A. Günther.)
- 85. Barbodes palawanensis Boulenger. Palawan (Boulenger, A).
  Barbus palawanensis Boulenger, Ann. Mag. N. H. (6) XV, 1895, 186;
  Palawan, P. I.
- 86. Barbodes hemictenus Jordan & Richardson. Mindoro (Jordan & Richardson).
  - Barbodes hemictenus Jordan & Richardson, Bull. U. S. Bur. Fish. XXVII, 242, 1908. Mindoro, P. I.

### RASBORA Bleeker.

- 87. Rasbora philippina Günther. Pasananca, near Zamboanga (Günther, A).

  Rasbora philippina Günther, Shore Fishes Challenger, p. 54; River at

  Pasananca, near Zamboanga, P. I.
- 88. Rasbora punctulata Seale & Bean, Zamboanga. (Seale & Bean).
- Rasbora everetti Boulenger. Palawan (Boulenger, A).
   Rasbora everetti Boulenger, Ann. Mag. N. H. (6) XV, 1895, 187; Palawan,
   P. I.

### **NEMATABRAMIS** Boulenger.

- Nematabramis everetti Boulenger. Palawan (Boulenger, A).
   Nematabramis everetti Boulenger, Ann. Mag. N. H. (6) XV, 1895, 187;
   Palawan, P. I.
- 91. Nematabramis alestes (Seale & Bean). Mearnsiella alestes (Seale & Bean). Zamboanga (Seale & Bean).

### DANGILA Cuvier & Valenciennes.

- 92. Dangila philippinia Heckel. Philippine Islands (Heckel, A).
  - Cyrene philippinia Heckel, Russegger's Reisen, I, 1025; Philippine Islands.
- 93. Dangila cyanopareia Heckel. Philippine Islands (Heckel, A).
  - Cyrene cyanopareia Heckel, Russegger's Reisen, I, 1025; Philippine Islands.

<sup>&</sup>lt;sup>1</sup> According to Mr. Seale, Mearnsiella alestes is probably a species of Nematabramis.

# Family SILURIDÆ.

### NETUMA Bleeker.

- 94. Netuma nasuta (Bleeker). Cavite (Jordan & Seale, A).
- 95. Netuma thalassina (Rüppell). Philippines (Jordan & Richardson); San Fabian; Bulan (Evermann & Seale, A).

# TACHYSURUS Lacépède. (Arius Cuv. & Val.)1

96. Tachysurus venosus (Cuvier & Valenciennes). Manila (Cuvier & Valenciennes, after figure of Mertens).

### RITA Bleeker.

97. Rita manillensis (Cuvier & Valenciennes). Manila (Cuvier & Valenciennes, XV, 93).

### **HEMIPIMELODUS** Bleeker.

98. Hemipimelodus manillensis (Cuvier & Valenciennes). Manila (Cuvier & Valenciennes, XV, 192).

# Family CLARIIDÆ.

### CLARIAS Gronow.

- 99. Clarias magur (Hamilton-Buchanan). Philippines, Jordan & Seale, A).
- 100. Clarias batrachus (Bloch). Luzon; Samar (Peters, C). (Clarias fuscus Auct.)
- 101. Clarias nieuhofii Cuvier & Valenciennes. Philippine Islands (Günther); Luzon (Peters, C).
- 102. Clarias gilli Smith & Seale. Mindanao (Smith & Seale).
  Clarias gilli Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906, 74, fig. a, b; Rio Grande, Mindanao, P. I.

# Family PLOTOSIDÆ.

# PLOTOSUS Lacépède.

103. Plotosus anguillaris (Bloch). Philippine Islands (Günther); Manila (Jordan & Seale, A); Cuyo (Jordan & Richardson); Jolo; Bacon (Evermann & Seale, A). Zamboanga (Seale and Bean).

# Family BELONIDÆ.

### TYLOSURUS Cocco.

- 104. Tylosurus giganteus (Temminck & Schlegel). Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Manila; Iloilo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 105. Tylosurus leiurus (Bleeker). Cavite (Jordan & Seale, A); Aparri (Jordan & Richardson). Zamboanga (Seale & Bean).

<sup>&</sup>lt;sup>1</sup> It is perhaps not certain that *Tachysurus chinensis* is a species of this genus, as the description of Lacépède, based on a Chinese painting, is not surely identifiable.

- 106. Tylosurus leiuroides (Bleeker). Bacon (Evermann & Seale, A). Zamboanga (Seale & Bean).
- 107. Tylosurus caudimaculatus (Cuvier). Iloilo (Jordan & Richardson).

# Family EXOCETIDÆ.

### HEMIRAMPHUS Cuvier.

- 108. Hemiramphus quoyi (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A); Manila (Evermann & Seale, B).
- 109. Hemiramphus limbatus Cuvier & Valenciennes. Cuyo (Jordan & Richardson).
- 110. Hemiramphus dussumieri (Cuvier & Valenciennes). Bacon; Bulan (Evermann & Seale, A).
- 111. Hemiramphus neglectus Bleeker. Aparri (Jordan & Richardson).
- 112. Hemiramphus marginatus (Forskål). Bacon (Evermann & Seale, A);
  Manila (Jordan & Richardson).
- 113. Hemiramphus lutkei Cuvier & Valenciennes. Manila (Cuvier & Valenciennes, record based on figure of Mertens). Made a synonym of *Hemiramphus marginatus* by Dr. Günther.
- 114. Hemiramphus cantoris Bleeker. Cavite (Jordan & Seale).
- 115. Hemiramphus cotnog Smith. Luzon (Smith). Hemiramphus cotnog, Smith, Bull. U. S. Fish Comm., XXI, 1902, 170, fig.; L. Buhi, Luzon, P. I.

### ZENARCHOPTERUS Gill.

- 116. Zenarchopterus philippinus Peters. Luzon; Samar (Peters, C); Bacon (Evermann & Seale, A). Zamboanga (Seale & Bean).
  Hemirhamphus (Zenarchopterus) philippinus Peters, Monatsber. Akad.
  Wiss. Berl., 1868, 273; Luzon and Samar.
- 117. Zenarchopterus dispar (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A). Zamboanga (Seale & Bean).

### **DERMATOGENYS** Van Hasselt.

118. Dermatogenys viviparus Peters. Luzon; Samar (Peters, A). Hemirhamphus (Dermatogenys) viviparus Peters, Monatsber. Akad. Wiss. Berl., 1865, 132; Samar, P. I.

# PAREXOCŒTUS Bleeker.

119. Parexocœtus mento (Cuvier & Valenciennes). Manila (Jordan & Richardson); Cavite (Jordan & Seale, A).

### CYPSELURUS 1 Swainson.

- 120. Cypselurus simus (Cuvier & Valenciennes). Bacon; Bulan (Evermann & Seale, A).
- 121. Cypselurus spilonotopterus (Bleeker). Negros (Jordan & Richardson) (Exocatus bahiensis Bleeker, probably not of Ranzani).
- 122. Cypselurus brachysomus (Bleeker). Cavite (Jordan & Seale, A).
- 123. Cypselurus altipinnis (Cuv. & Val.) Zamboanga (Seale & Bean).

<sup>&</sup>lt;sup>1</sup>Cypsilurus Swainson is plainly an error of transcription.

# Family ATHERINIDÆ.

### ATHERINA Linnæus.

- 124. Atherina lacunosa Forster. Iloilo (Jordan & Richardson); Bacon (Jordan & Seale, A). Zamboanga (Seale & Bean) (dark lateral band; no dark on pectoral). (It is not certain what the original of Atherina lacunosa really is.)
- 125. Atherina temmincki (Bleeker). Negros (Jordan & Seale, B); Bulan; Bacon (Evermann & Seale, A).
- 126. Atherina forskalii Rüppell. Bulan; Bacon (Evermann & Seale, A).
- 127. Atherina lineata Günther. Cebu (Günther, C).

Atherina lineata Günther, Ann. Mag. Nat. Hist., 1872, 398; Cebu, P. I.

128. Atherina panatela Jordan & Richardson. Calayan (Jordan & Richardson). Atherina panatela Jordan & Richardson, Bull U. S. Bur. Fish., XXVII, 244, 1908. Calayan, P. I.

# Family MUGILIDÆ.

### MUGIL Linnæus.

- 129. Mugil cephalus Linnæus. Calayan (Jordan & Richardson). Manila, Kner (Mugil cephalotus).
- 130. Mugil planiceps Cuvier & Valenciennes. Bulan (Evermann & Seale, A).
- 131. Mugil sundanensis Bleeker. Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A); Manila (Evermann & Seale, B).
- 132. Mugil kelaartii Günther. Philippine Islands (Günther); Luzon (Peters, C).
- 133. Mugil longimanus Günther. Cavite (Jordan & Seale, A).

### LIZA Jordan & Swain.

- 134. Liza amarula (Cuvier & Valenciennes). Cavite (Jordan & Seale, A). Zamboanga. (Seale & Bean).
- 135. Liza waigiensis (Quoy & Gaimard). Cavite (Jordan & Seale, A). Zamboanga (Seale & Bean).
- 136. Liza oligolepis (Bleeker). Iloilo (Jordan & Richardson).
- 137. Liza troscheli (Bleeker). Cavite (Jordan & Seale, A); Iloilo (Jordan & Richardson); Manila (Evermann & Seale, A); Mindanao (Smith & Seale). Zamboanga (Seale & Bean).

# ÆSCHRICHTHYS Macleay.

138. Æschrichthys goldiei Macleay. Mindoro (Jordan & Richardson).
Æschrichthys goldiei Macleay, Proc. Linn. Soc. N. S. Wales, 1883, 5, fig.
1 & 2; Goldie R., New Guinea.

# Family SPHYRÆNIDÆ.

# SPHYRÆNA Linnæus.

- 139. Sphyræna obtusata Cuvier & Valenciennes. Cavite (Jordan & Seale, A);
  Bulan (Evermann & Seale, A); Mindanao (Smith & Seale). Zamboanga (Seale & Bean).
- 140. Sphyræna jello Cuvier & Valenciennes. Manila (Jordan & Seale, A);
  Negros (Jordan & Seale, B) Iloilo (Jordan & Richardson); Bacon;
  Bulan (Evermann & Seale, A).

- 141. Sphyræna langsar Bleeker. Bulan; Bacon; San Fabian (Evermann & Seale, A).
- 142. Sphyræna snodgrassi Jenkins. Aparri (Jordan & Richardson). (Identification doubtful, probably Sphyræna commersoni.)
  - Sphyrana snodgrassi Jenkins, Bull. U. S. Fish Comm., XIX, 1899, 388, fig. 2; Honolulu, H. I.

# Family POLYNEMIDÆ.

# POLYDACTYLUS Lacépède.

- 143. Polydactylus plebeius (Browssonet). Zamboanga (Seale & Bean).
- 144. Polydactylus zophomus Jordan & Seale. Cavite (Jordan & Seale, A);
  Manila; Iloilo (Jordan & Richardson).
  - Polydactylus zophomus Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 11, fig. 4; Cavite, Luzon, P. I.
- 145. Polydactylus sealei Jordan & Richardson, new specific name. (Polydactylus opercularis Seale & Bean, Proc. U. S. N. M., 1907, 234, not of Gill.)
  Zamboanga (Seale & Bean).

### ELEUTHERONEMA Bleeker.

146. Eleutheronema tetradactylum (Shaw). Manila (Jordan & Richardson).

# Family AULOSŢOMIDÆ.

### AULOSTOMUS Cuvier.

147. Aulostomus chinensis (Linnæus). Philippine Islands (Lacépède, fide Commerson).

(Aulostoma valentini Bleeker.)

# Family FISTULARIIDÆ.

# FISTULARIA Linnæus.

- 148. Fistularia petimba Lacépède. Cuyo; Lubang (Jordan & Richardson); San Fabian; Bacon (Evermann & Seale, A); Cavite (Jordan & Seale, A).
- 149. Fistularia serrata Cuvier. Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); Bacon (Evermann & Seale, A).

# Family CENTRISCIDÆ.

### CENTRISCUS Linnæus.

150. Centriscus scutatus Linnæus. Philippine Islands (Günther); Station 203, Philippines (Günther, A); Manila (Jordan & Seale, A).

# ÆOLISCUS Jordan & Starks.

151. Æoliscus strigatus (Günther). Cagayancillo (Jordan & Richardson);
Bacon (Evermann & Seale, A).

# Family SYNGNATHIDÆ.

# SIPHOSTOMA Rafinesque.

152. Siphostoma schlegeli (Kaup). Zamboanga (Seale & Bean). (A Japanese species, not to be expected to occur so far south.)

### CORYTHROICHTHYS Kaup.

- 153. Corythroichthys spicifer (Kaup). Manila; Cavite (Jordan & Seale, A);

  Aparri (Jordan & Richardson); Luzon (Peters, C); Samar; Leyte (Peters, C, var. rivalis).
- 154. Corythroichthys pullus Smith & Seale. Rio Grande, Mindanao (Smith & Seale).
  - Corythroichthys pullus Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906, 75, fig; Rio Grande, Mindanao, P. I.
- 155. Corythroichthys eleræ Evermann & Seale. Bacon (Evermann & Seale, A). Corythroichthys eleræ Evermann & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 57, fig. 2; Bacon, P. I.
- 156. Corythroichthys bleekeri Day. Zamboanga (Seale & Bean).

### DORYRHAMPHUS Kaup.

157. Doryrhamphus macgregori Jordan & Richardson. Calayan (Jordan & Richardson).

Doryrhamphus maegregori Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 246, 1908. Calayan, P. I.

### **CŒLONOTUS** Peters.

158. Cœlonotus leiaspis (Bleeker). Mindoro; Sibuyan (Jordan & Richardson).

### DORYICHTHYS Kaup.

159. Doryichthys spaniaspis Jordan & Seale. Cavite (Jordan & Seale, A). Doryichthys spaniaspis Jordan & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 10, fig. 3; Cavite, P. I.

# MICROPHIS Kaup.

- 160. Microphis pleurostictus Peters. Luzon (Peters, C; Günther); Palawan (Boulenger, A).
- 161. Microphis caudatus Peters. Samar (Peters, C).
- 162. Microphis jagorii Peters. Samar (Peters, C).

# GASTEROTOKEUS Heckel.

163. Gasterotokeus biaculeatus (Bloch). Philippine Islands (Günther; Richardson, B); Leyte (Peters, C); Panay (Jordan & Seale, A); Negros (Jordan & Seale, B); Cuyo; (Jordan & Richardson); Bacon (Evermann & Seale, A). Zamboanga (Seale & Bean).

### HIPPOCAMPUS Linnæus.

- 164. Hippocampus kuda Bleeker. Cavite (Jordan & Seale, A); Mindoro (Jordan & Richardson); Zamboanga (Seale & Bean).
- 165. Hippocampus aterrimus Jordan & Snyder. Cavite (Jordan & Seale, A);
  Negros (Jordan & Seale, B, Hippocampus kuda, not of Bleeker).
  - Hippocampus aterrimus Jordan & Snyder, Proc. U. S. Nat. Mus., XXIV, 1901, 14, pl. IX; Ishigaki, Riukiu.
- 166. Hippocampus barbouri Jordan & Richardson. Cuyo; (Jordan & Richardson).
  - Hippocampus barbouri Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII, 247, 1908. Cuyo, P. I.

# Family PEGASIDÆ.

# PARAPEGASUS Duméril.

167. Parapegasus natans (Linnæus). Cavite (Jordan & Seale, A).

### PEGASUS Linnæus.

168. Pegasus volitans Linnæus. (Pegasus draconis Linnæus (1768). Zamboanga (Seale & Bean).

# Family HOLOCENTRIDÆ.

### MYRIPRISTIS Cuvier.

- 169. Myripristis murdjan (Forskål). Cagayancillo (Jordan & Richardson);
  Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 170. Myripristis microphthalmus Bleeker. Bacon; Bulan (Evermann A Seale, A).
- 171. Myripristis pralinius Cuvier & Valenciennes. Bacon (Evermann & Seale, A).
- 172. Myripristis macrolepis Bleeker. Zamboanga (Evermann' & Seale, A). Zamboanga (Seale & Bean).

### HOLOCENTRUS (Artedi) Gronow.

- 173. Holocentrus ruber Lacépède. Cagayancillo; Cuyo; Calayan (Jordan & Richardson); Philippines (Günther, Holocentrus rubrum); Panay (Jordan & Seale, A, Holocentrus ruber); Manila (Kner, Holocentrus rubrum). (Including the ontogenetic subspecies praslin found on coral reefs.)
- 174. Holocentrus caudimaculatus Rüppell. Zamboanga (Seale & Bean).
- 175. Holocentrus lacteoguttatus Cuvier & Valenciennes. Calayan (Jordan & Richardson).
  - (Holocentrus lacteoguttatum, punctatissimum, and argenteum, Cuvier & Valenciennes; diploxiphus Günther; gracilospinis and gladispinis Fowler).
- 176. Holocentrus microstomus Günther. Cagayancillo (Jordan & Richardson).
- 177. Holocentrus cornutus Bleeker. Bacon; Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 178. Holocentrus sammara (Forskål). Cagayancillo (Jordan & Richardson).

# Family SCOMBRIDÆ.

### SCOMBER Linnæus.

- 179. Scomber microlepidotus Rüppell. Cavite (Jordan & Seale, A); Manila; (Jordan & Richardson); Bacon (Evermann & Seale, A); Zamboanga, (Seale & Bean).
- 180. Scomber japonicus Houttuyn. Bulan (Evermann & Seale, A).

### RASTRELLIGER Jordan & Dickerson.

- 181. Rastrelliger brachysomus Bleeker. San Fabian (Evermann & Seale, A).
- 182. Rastrelliger loo Cuvier & Valenciennes. Manila (Kner).

### EUTHYNNUS 1 Lütken.

183. Euthynnus pelamis (Linnæus). Bulan (Evermann & Seale, A).

# NESOGRAMMUS Evermann & Seale.

184. Nesogrammus piersoni Evermann & Seale. Bulan (Evermann & Seale, A).
Nesogrammus piersoni Evermann & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 61, fig. 3; Bulan, P. I.

# SCOMBEROMORUS Lacépède.

- 185. Scomberomorus commersoni Lacépède. Cavite (Jordan & Seale, A).
- 186. Scomberomorus konam (Bleeker). Manila (Kner).

# Family CARANGIDÆ.

# SCOMBEROIDES Lacépède.

- 187. Scomberoides tol (Cuvier & Valenciennes). Manila (Jordan & Richardson); Cavite (Jordan & Seale, A, Scomberoides toloo-parah, not of Rüppell). (Chorinemus moadetta Day, not of C. & V.)
- 188. Scomberoides toloo-parah (Rüppell). Cavite (Jordan & Richardson); San Fabian (Evermann & Seale, A); Mindanao (Smith & Seale); Zamboanga. (Seale & Bean).

### ELERIA Jordan & Seale.

- 189. Eleria philippina Jordan & Seale. Negros (Jordan & Seale, B).
  Eleria philippina Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 774, fig. 1; Negros, P. I.
  - (=Chorinemus tala Day, probably not C. & V.)
- 190. Eleria tala (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Manila; Iloilo (Jordan & Richardson); Mindanao (Smith & Seale). (Chorinemus tala & toloo C. & V.; (?) Scomber aculeatus Bloch). Zamboanga (Seale & Bean).

### SERIOLA Cuvier.

- 191. Seriola nigrofasciata (Rüppell). Bulan (Evermann & Seale, A).
- 192. Seriola dumerilii (Risso). Manila (Kner).

### LACTARIUS Cuvier & Valenciennes.

193. Lactarius lactarius (Bloch & Schneider). San Fabian (Evermann & Seale, A).

### MEGALASPIS Bleeker.

194. Megalaspis cordyla (Linnæus). Bulan; Jolo (Evermann & Seale, A);
Manila (Jordan & Richardson); Zamboanga (Seale & Bean).

# **DECAPTERUS** Bleeker.

- 195. Decapterus macrosomus Bleeker. Bulan; Bacon (Evermann & Seale, A).
- 196. Decapterus kurra Bleeker. Bulan (Evermann & Seale, A).

<sup>&</sup>lt;sup>1</sup>The genus *Gymnosarda* (nuda) with scaleless corselet is apparently distinct from Euthynnus.

### TRACHUROPS Gill.

197. Trachurops crumenophthalma (Bloch). Cavite (Jordan & Seale, A);
Manila; Lubang (Jordan & Richardson).

# CARANX Lacépède.

- 198. Caranx forsteri (Cuvier & Valenciennes). Negros (Jordan & Seale, B);
  Manila; Lubang; Iloilo; Cagayancillo (Jordan & Richardson).
- 199. Caranx ignobilis (Forskål). Cavite (Jordan & Seale, A); Iloilo; Lubang (Jordan & Richardson); Mindanao (Smith & Seale, Caranx carangus, specimens said to have breast naked); Zamboanga (Seale & Bean) as Caranx carangus.
- 200. Caranx sexfasciatus Quoy & Gaimard. Cavite (Jordan & Seale, A); San Fabian (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 201. Caranx boops Cuvier & Valenciennes. Bacon (Evermann & Seale, A).
- 202. Caranx affinis Rüppell. Cavite (Jordan & Richardson; Jordan & Seale, A, Caranx hasselti, not of Bleeker).
- 203. Caranx hasselti Bleeker. Negros (Jordan & Seale, B).
- 204. Caranx cynodon Bleeker. Bacon (?) (Evermann & Seale, A).
- 205. Caranx brevis (Bleeker). Philippines (Evermann & Seale, A).
- 206. Caranx freeri Evermann & Seale. San Fabian (Evermann & Seale, A).
  Caranx freeri Evermann & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 63, fig. 4; San Fabian, P. I.
- 207. Caranx ophthalmotænia (Bleeker). Bulan (Evermann & Seale, A).
- 208. Caranx ire Cuvier & Valenciennes. Negros (Jordan & Seale, B); Manila; Iloilo (Jordan & Richardson).
- 209. Caranx leptolepis Cuvier & Valenciennes. Manila (Cuvier & Valenciennes, Caranx mertensi; based on figure of Mertens); Cavite (Jordan & Richardson).
- 210. Caranx calla Cuvier & Valenciennes. Cavite (Jordan & Seale, A, Caranx nigripinnis, not of Day); Manila; Iloilo (Jordan & Richardson); Bulan (Evermann & Seale, A).
- 211. Caranx djeddaba (Forskål). Manila (Jordan & Richardson); Philippines (Evermann & Seale, A).
- 212. Caranx deani Jordan & Seale. Negros (Jordan & Seale, B); Cavite (Jordan & Richardson).
  - Caranx deani Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 776, fig. 2; Negros P. I.
- 213. Caranx rastrosus Jordan & Snyder.
  - (Caranx rastrosus Jordan & Snyder, Bull. Carnegie Museum, 1908, IV, p. 37, pl. 61, Formosa, Cavite).
- 214. Caranx armatus (Forskål). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A).
- 215. Caranx altissimus Jordan & Seale. Manila (Jordan & Richardson).
  Caranx altissimus Jordan & Seale, Proc. Davenport Acad., X, 1905, 7, pl. 3;
  Hong Kong.
- 216. Caranx halli (Evermann & Seale, ) San Fabian (Evermann & Seale, A).
  Citula halli Evermann & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 65, fig. 5, San Fabian, P. I.

# ULUA Jordan & Snyder.

217. Ulua richardsoni Jordan & Snyder. Cavite (Lung Coll. recorded as Caranx plumbeus).

(Ulua richardsoni Jordan & Snyder, Bull. Carnegie Museum, 1908, IV, p. 39, pl. LIII: Formosa; Cavite.)

### GNATHANODON Bleeker.

218. Gnathanodon speciosus (Forskål). Philippine Islands (Gunther); Cavite (Jordan & Seale, A) Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).

# ALECTIS Rafinesque.

219. Alectis major (Cuvier & Valenciennes). Manila (Jordan & Richardson); Cavite (Jordan & Seale, A, Alectis ciliaris, not of Bloch). Zamboanga (Seale & Bean) as Alectis ciliaris.

Zeus gallus Bloch, not of Linnæus; (?) Zeus virescens Lacépède; Gallichthys major Cuvier & Valenciennes; Scyris indica Rüppell.

### TRACHINOTUS Lacépède.

220. Trachinotus bailloni (Lacépède). Zamboanga (Evermann & Seale, A).

# APOLECTUS Cuvier & Valenciennes.

221. Apolectus niger (Bloch). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson).

# Family RACHYCENTRIDÆ.

### RACHYCENTRON Kaup.

222. Rachycentron canadum (Linnæus). Manila; Panay (Jordan & Seale, A, Rachycentron pondicerianum); Manila (Jordan & Richardson); Bulan (Evermann & Seale, A).

# Family TRICHIURIDÆ.

### TRICHIURUS Linnæus.

- 223. Trichiurus haumela (Forskâl). Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A); Cavite (Jordan & Seale, A, Trichiurus savala, not of Bleeker).
- 224. Trichiurus lajor Bleeker. Manila (Kner).

# Family EQUULIDÆ.

# LEIOGNATHUS Lacépède.

225. Leiognathus caballus (Cuvier & Valenciennes). Manila; Iloilo; Aparri (Jordan & Richardson); Cavite (Jordan & Seale, A, Leiognathus dussumieri, not of C. & V.); San Fabian (Evermann & Seale, A, Leiognathus edentula). (=Totah-Karah Russell; (?) Scomber equula Forskål). Zamboanga (Seale & Bean) as L. edentula.

- 226. Leiognathus ensiferus (Cuvier & Valenciennes). Manila (Jordan & Richardson); Philippine Islands (Günther, A, Equula dussumieri; (?) Mindanao (Smith & Seale, Leiognathus dussumieri).
  - (=Equula ensifera & dussumieri Cuvier & Valenciennes; Equula dussumieri, Günther; Equula edentula, Günther, part). Zamboanga (Seale & Bean) (as L. dussumieri).
- 227. Leiognathus coma (Cuvier & Valenciennes). Iloilo; Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A, Leiognathus dussumieri, not of C. & V.).
  - (Equula coma Cuvier & Valenciennes, after Komah-Karah of Russell.)
- 228. Leiognathus splendens (Cuvier). Negros (Jordan & Seale, B); Manila, Aparri (Jordan & Richardson); San Fabian; Bacon (Evermann & Seale, A); Mindanao (Smith & Seale).
- 229. Leiognathus fasciatus (Lacépède). Philippine Islands (Günther; also A);
  Manila (Cuvier & Valenciennes, Equula longispinis, after drawing made
  by Russian Expedition); Cavite (Jordan & Seale, A); San Fabian
  (Evermann & Seale, A).
- 230. Leiognathus leuciscus (Günther). Negros (Jordan & Seale, B).
- 231. Leiognathus virgatus Fowler. Bulan (Evermann & Seale, A).
  Leiognathus virgatus Fowler, Journ. Ac. Nat. Sci. Phila., (2) XII, 1904,
  515, pl. XV, fig. 4; Padang, Sumatra.
- 232. Leiognathus stercorarius Evermann & Seale. Bulan (Evermann & Seale, A).
  - Leiognathus stercorarius Evermann & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 67, fig. 6; Bulan, P. I.
- 233. Leiognathus edwardsi Evermann & Seale. San Fabian (Evermann & Seale,  $\mathbf{A}$ ).
  - Leiognathus edwardsi Eyermann & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 68, fig. 7; San Fabian, P. I.

# EQUULA Cuvier. (Deveximentum Fowler.)

- 234. Equula insidiator (Bloch). Manila (Kner); Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Manila (Jordan & Richardson).
- 235. Equula ruconia (Hamilton-Buchanan). Cavite (Jordan & Seale, A).

### GAZZA Rüppell.

- 236. Gazza minuta (Bloch). Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Iloilo; Manila; Lubang (Jordan & Richardson); San Fabian (Evermann & Seale, A); Mindanao (Smith & Seale).
- 237. Gazza tapeinosoma Bleeker. Bulan (Evermann & Seale, A).

# Family MENIDÆ.

# MENE Lacépède.

238. Mene maculata (Bloch). Panay (Jordan & Seale, A); Manila (Jordan & Richardson).

<sup>&</sup>lt;sup>1</sup> Description by Smith & Seale not sufficient for determination. These writers probably followed Günther, in which case references fall in present synonymy.

# Family PEMPHERIDÆ.

### PEMPHERIS Cuvier.

- 239. Pempheris oualensis Cuvier & Valenciennes. Calayan (Jordan & Richardson).
- 240. Pempheris vanicolensis Cuvier & Valenciennes. Bacon; Bulan (Evermann & Seale, A).

# Family APOGONICHTHYIDÆ.

# AMIA Gronow. (Apogon Lacépède.)

- 241. Amia hyalosoma (Bleeker). Luzon (Peters, C); Calayan; Mindoro (Jordan & Richardson).
- 242. Amia koilomatodon (Bleeker). Bacon (Evermann & Seale, A).
- 243. Amia margaritophora (Bleeker). Bacon (Evermann & Seale, A).
- 244. Amia sangiensis (Bleeker). Bulan (Evermann & Seale, A).
- 245. Amia monochroa (Bleeker). Bulan (Evermann & Seale, A).
- 246. Amia novæ-guineæ (Valenciennes). Philippines (Jordan & Seale, A);
  Negros (Jordan & Seale, B); Iloilo (Jordan & Richardson).
- 247. Amia bifasciata (Rüppell). Philippine Islands (Günther). (?Amia elizabethæ Jordan & Seale).
- 248. Amia quadrifasciata (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); Jolo (Evermann & Seale, A).
- 249. Amia endekatænia (Bleeker). Bacon (Evermann & Seale, A).
- 250. Amia novemfasciata (Cuvier & Valenciennes). Negros (Jordan & Seale, B); Calayan; Cuyo; Ticao (Jordan & Richardson); Bacon (Evermann & Seale, A, Amia fasciata, not of White). Apogon fasciatus Peters, C., Luzon, Samar, is doubtless A. novemfasciata. Zamboanga, as Amia fasciata (Seale & Bean).
- 250a. Amia frænata (Valenciennes). Bacon (Evermann & Seale, A).
- 251. Amia savayensis (Günther). Bacon (Evermann & Seale, A).
- 252. Amia chrysopoma (Bleeker). Bacon (Evermann & Seale, A).
- 253. Amia hartzfeldi (Bleeker). Bacon (Evermann & Seale, A).
- 254. Amia kalloptera (Bleeker). Fuga (Jordan & Richardson).
- 255. Amia lateralis (Valenciennes). Cuyo (Jordan & Richardson).
- 256. Amia bleekeri (Günther). Bacon; San Fabian (Evermann & Seale, A).
- 257. Amia gilberti Jordan & Seale. Negros (Jordan & Seale, B).
  Amia gilberti Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 777, fig. 3; Negros, P. I.
- 258. Amia cavitensis Jordan & Seale. Cavite (Jordan & Seale, A).
  Amia cavitensis Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 16, fig. 5; Cavite, P. I.
- 259. Amia jenkinsi (Evermann & Seale). Bulan (Evermann & Seale, A).
  Amia jenkinsi Evermann & Seale, Bull. U. S. Fish Comm., XXVI, 196, 73, fig. 9; Bulan, P. I.
- 260. Amia orbicularis (Cuvier & Valenciennes). Palawan (Vaillant); Zamboanga (Seale & Bean).

<sup>&</sup>lt;sup>1</sup> If Mullus fasciatus White from Sydney is a species distinct from Apogon fasciata Quoy & Gaimard, as it seems to be, the name novemfasciata of C. & V., although published later must supersede fasciata of Q. & G.

### MIONORUS Krefft.

- 261. Mionorus glaga (Bleeker). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson).
- 262. Mionorus mydrus (Jordan & Seale). Negros (Jordan & Seale, B).
  Mionorus mydrus Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 778, fig. 4; Negros, P. I.

# APOGONICHTHYS Bleeker. (Foa Jordan & Evermann.)

263. Apogonichthys fo Jordan & Seale. Negros (Jordan & Seale, B); Cavite (Jordan & Seale, A); Iloilo (Jordan & Richardson).
Foa fo Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 779, fig. 5; Negros, P. I. (with figure of Fowleria brachygramma).

# ARCHAMIA Gill.

- 264. Archamia lineolata (Ehrenberg). Cavite (Jordan & Seale, A); Zamboanga (Smith & Seale).
- 265. Archamia macropteroides (Bleeker). Bacon (Evermann & Seale, A).
- 266. Archamia bleekeri (Günther). Bacon; San Fabian (Evermann & Seale, A).

### PSEUDAMIA Bleeker.

267. Pseudamia polystigma (Bleeker). Cavite (Jordan & Seale, A).

### FOWLERIA Jordan & Evermann.

268. Fowleria mentalis (Evermann & Seale). Bacon (Evermann & Seale, A).
Apogonichthys mentalis Evermann & Seale, Bull. U. S. Fish Comm., XXVI,
1906, 74, fig. 10; Bacon, P. I. This species may not belong to this genus.

# Family AMBASSIDÆ.

# AMBASSIS Lacépède.

- 269. Ambassis urotænia Bleeker. Calayan; Iloilo (Jordan & Richardson);
  Bacon (Evermann & Seale, A); Mindanao (Smith & Seale).
- 270. Ambassis lungi <sup>1</sup> (Jordan & Seale). Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A). Zamboanga (Seale & Bean).
  - Priopis lungi Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 18, fig. 6; Cavite.
- 271. Ambassis kopsi (Bleeker). Cavite (Jordan & Seale, A); Iloilo (Jordan & Richardson).
- 272. Ambassis commersonii Cuvier & Valenciennes.
  (Centropomus ambassis Lacépède) Philippines (Günther).

### PRIOPIS Kuhl & Van Hasselt. (Lateral line interrupted.)

- 273. Priopis interruptus (Bleeker). Luzon; Samar (Peters, C); Cavite (Jordan & Seale, A); Mindoro; Cuyo (Jordan & Richardson).
- 274. Priopis buruensis (Bleeker). Cavite (Jordan & Seale, A); Aparri (Jordan & Richardson).
- 275. Priopis gymnocephalus (Lacépède). Negros (Jordan & Seale, B).
- 276. Priopis urotænia (Bleeker). Zamboanga (Seale & Bean).

 $<sup>^{1}\,\</sup>mathrm{The}$  lateral line in this species is really complete. It is therefore an  $A\,mbassis$  not a Priopis.

# Family ACROPOMATIDÆ.

### ACROPOMA Temminck & Schlegel.

277. Acropoma philippinense Günther. Sta. 201, Philippine Islands (Günther,

Acropoma philippinense Günther, Shore Fishes Challenger, p. 51; Sta. 201, Philippine Islands.

# Family KUHLIIDÆ.

### KUHLIA Gill.

- 278. Kuhlia marginata (Cuvier & Valenciennes). Rio Baco, Mindoro; Aparri (Jordan & Richardson).
- 279. Kuhlia rupestris (Lacépède). Samar; Leyte (Peters, C); Mindoro (Jordan & Richardson). Zamboanga (Seale & Bean).
- 280. Kuhlia malo (Cuv. & Val.). Zamboanga (Seale & Bean.)

# Family SERRANIDÆ.

### LATES Cuvier.

281. Lates calcarifer (Bloch). Cavite (Jordan & Seale, A); Zamboanga (Evermann & Seale, A).

### NIPHON Cuvier & Valenciennes.

282. Niphon spinosus Cuvier & Valenciennes. Cuyo (Jordan & Richardson).

### VARIOLA Swainson.

283. Variola louti (Forskål). Calayan (Jordan & Richardson).

### CEPHALOPHOLIS Bloch & Schneider.

- 284. Cephalopholis stigmatopomus (Richardson). Manila (Jordan & Seale, A).
- 285. Cephalopholis miniatus (Forskål). Calayan (Jordan & Richardson).
- 286. Cephalopholis argus (Bloch). Cagayancillo (Jordan & Richardson).
- 287. Cephalopholis maculatus Seale & Bean). Zamboanga (Seale & Bean).
- 288. Cephalopholis leopardus (Lacépède). Calayan (Jordan & Richardson).
- 289. Cephalopholis urodelus (Forster). Zamboanga (Seale & Bean).
- 290. Cephalopholis boenack (Bloch). Bacon (Evermann & Seale, A).
- 291. Cephalopholis sonnerati (Cuv. & Val.). Zamboanga (Seale & Bean).
- 292. Cephalopholis pachycentron (Cuvier & Valenciennes). Bacon (Evermann & Seale, A).
- 293. Cephalopholis kendalli Evermann & Seale. Bacon (Evermann & Seale, A). Cephalopholis kendalli Evermann & Seale. Bull. U. S. Bur. Fish, XXVI, 1906, 76, fig. 11; Bacon, P. I.
- 294. Cephalopholis obtusauris Evermann & Seale. Bacon (Evermann & Seale, A).
  - Cephalopholis obtusauris Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 77, fig. 12; Bacon, P. I. Zamboanga (Seale & Bean).

# EPINEPHELUS Bloch.

295. Epinephelus merra Bloch. Philippine Islands (Günther; Boulenger, B);
Bacon (Evermann & Seale, A) (prob, not S. merra of Day, which
prob.=Epinephelus megachir); Zamboanga (Seale & Bean).

- 296. Epinephelus hexagonatus (Bloch & Schneider). Philippine Islands (Günther). (Regarded as a synonym of *Epinephelus merra* by Boulenger, Cat. I, 241.)
- 297. Epinephelus tauvina (Forskål). Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 298. Epinephelus malabaricus (Bloch). Cavite (Jordan & Seale, A); Philippine Islands (Günther, Serranus suillus). (Regarded as synonym of Epinephelus tauvina by Boulenger.)
- 299. Epinephelus megachir (Richardson). Philippine Islands (Boulenger, B); Cavite (Jordan & Seale, A); Calayan (Jordan & Richardson).
- 300. Epinephelus diacanthus (Cuvier & Valenciennes). Philippine Islands (Günther, A); Cavite (Jordan & Seale, A); Cuyo; Cagayancillo (Jordan & Richardson).
- 301. Epinephelus bontoides (Bleeker). Mindanao (Smith & Seale).
- 302. Epinephelus fasciatus (Forskål). Cebu (Boulenger, B); Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 303. Epinephelus maculatus (Bloch). San Fabian (Evermann & Seale, A). (=Serranus albofuscus of Günther).
- 304. Epinephelus nebulosus (Cuvier & Valenciennes). Aparri (Jordan & Richardson).
- 305. Epinephelus cæruleopunctatus (Bloch). Philippine Islands (Boulenger, B).
- 306. Epinephelus fuscoguttatus (Forskål). Philippine Islands (Boulenger, B).
- 307. Epinephelus undulosus (Quoy & Gaimard). Zamboanga (Seale & Bean).

### CROMILEPTES Swainson.

308. Cromileptes altivelis (Cuvier & Valenciennes). Cebu (Boulenger, B);
Manila (Jordan & Seale, A); Negros (Jordan & Seale, B); Bacon
Evermann & Seale, A).

### PSAMMOPERCA Richardson.

309. Psammoperca waigiensis (Cuvier & Valenciennes). Bulan (Evermann & Seale, A); Manila (Müller & Troschel, Cnidon chinensis; Günther, after M. & T; Kner); Cebu (Boulenger, B).

### GRAMMISTES Bloch & Schneider.

310. Grammistes sexlineatus (Thunberg). Philippine Islands (Günther, Grammistes orientalis, Boulenger, B); Bacon (Evermann & Seale, A); Palawan (Vaillant, Grammistes orientalis).

CENTROGENYS Richardson. (Myriodon Brisout de Barneville; Gennadius Jordan & Seale.)

311. Centrogenys vaigiensis (Quoy & Gaimard). Panay (Jordan & Seale, A, Gennadius stoliczæ); Cuyo (Jordan & Richardson); Cebu (Boulenger, B).

The serranoid rather than scorpenoid affinities of the Scorpene de Vaigiou of Quoy & Gaimard (erroneously figured with lower pectoral rays unbranched) seems to be beyond question. There also seems to be no doubt that the Sebastes stoliczæ of Day (=Gennadius stoliczæ, Jordan & Seale) is identical with the present species of Quoy & Gaimard, as subsequently admitted by Dr. Day and more recently formally stated by Boulenger.

# PHAROPTERYX Rüppell.

- 312. Pharopteryx nigricans (Rüppell). Luzon (Peters, C), Plesiops caruleolineatus); Bacon (Evermann & Seale, A); Calayan (Jordan & Richardson); Palawan (Vaillant, Plesiops corallicola).
- 313. Pharopteryx melas (Bleeker). Negros (Jordan & Seale, B); Calayan (Jordan & Richardson).

# Family PRIACANTHIDÆ.

### PRIACANTHUS Cuvier. (Plesiops Cuvier.)

- 314. Priacanthus cruentatus (Lacépède). Cavite (Jordan & Seale, A).
- 315. Priacanthus hamrur (Forskål). Bulan (Evermann & Seale, A); Calayan (Jordan & Richardson).

# Family LUTIANIDÆ.

### LUTIANUS Bloch.

- 316. Lutianus sebæ (Cuvier & Valenciennes). Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 317. Lutianus decussatus (Cuvier & Valenciennes). Philippine Islands (Günther); Manila (Jordan & Seale, A); Negros (Jordan & Seale, B); Bacon (Evermann & Seale, A).
- 318. Lutianus gibbus (Forskål). Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 319. Lutianus fulviflamma (Forskål). Bacon; Zamboanga (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 320. Lutianus russelli (Bleeker). Cavite (Jordan & Seale, A); Cuyo; Iloilo (Jordan & Richardson). Perhaps not distinct from Lutianus fulviflamma.
- 321. Lutianus Iuzonius Evermann & Seale. Bacon (Evermann & Seale, A).
  Lutianus luzonius Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 80, fig. 13; Bacon, P. I.
- 322. Lutianus rivulatus (Cuv. & Val.). Zamboanga (Seale & Bean).
- 323. Lutianus monostigma (Cuvier & Valenciennes). Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 324. Lutianus amboinensis (Bleeker). Bulan (Evermann & Seale, A).
- 325. Lutianus johni (Bloch). Philippine (Kner); Negros (Jordan & Seale, B); Bacon; Bulan; Jolo (Evermann & Seale, A).
- 326. Lutianus dodecacanthoides (Bleeker). Manila (Jordan & Seale, A).
- 327. Lutianus quinquelineatus (Bloch). Bulan (Evermann & Seale, A); Manila; Aparri (Jordan & Richardson).
- 328. Lutianus vitta (Quoy & Gaimard). Cavite (Jordan & Seale, A); Bacon; Bulan; Zamboanga (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 329. Lutianus lineatus (Quoy & Gaimard). San Fabian (Evermann & Seale, A); Mindanao (Smith & Seale); Aparri; Lubang (Jordan & Richardson).
- 330. Lutianus marginatus (Cuv. & Val.). Zamboanga (Seale & Bean).
- 331. Lutianus chrysotænia Bleeker. Zamboanga (Seale & Bean).
- 332. Lutianus malabaricus (Bloch & Schneider). Bulan (Evermann & Seale, A); Mindanao (Smith & Seale).

- 333. Lutianus furvicaudatus Fowler. Bacon (Evermann & Seale, A).
  Lutianus furvicaudatus Fowler, Journ. Ac. Nat. Sci. Phila., (2) XII, 1904,
  525, pl. XVIII, lower fig.; Padang.
- 334. Lutianus lunulatus (Mungo Park). Bacon; Bulan (Evermann & Seale, A).
- 335. Lutianus erythropterus Bloch. (Not of Bleeker, which=Lutianus lineolata Rüppell). San Fabian (Evermann & Seale, A).

The identity of Bloch's Lutianus erythropterus with the Mesoprion annularis of Cuvier & Valenciennes seems to rest on the authority of Dr. Day, who examined the types and found one of them "with the distinct colors of the annularis." The description and figure of Bloch give a far from adequate idea of what species was meant.

336. Lutianus lineolatus (Rüppell). Bacon; Bulan (Evermann & Seale, A).

(=Lutianus lineolatus of Day=Lutianus crythropterus of Bleeker; probably not Lutianus crythropterus of Bloch as stated by Jordan & Seale.

ably not Lutianus erythropterus of Bloch, as stated by Jordan & Seale, Fishes Samoa, p. 264; see note on preceding species.)

- 337. Lutianus kasmira Forskål). Fuga Island (Jordan & Richardson); Zamboanga (Seale & Bean).
- 338. Lutianus argentimaculatus (Forskål). Calayan; Rio Baco, Mindoro; Iloilo (Jordan & Richardson).

# NEMIPTERUS Swainson (Synagris Günther).

- 339. Nemipterus japonicus (Bloch). Cavite (Jordan & Seale, A); San Fabian (Evermann & Seale, A); Manila (Jordan & Richardson).
- 340. Nemipterus ovenii (Bleeker). Cavite (Jordan & Seal, A); Bulan (Evermann & Seale, A).
- 341. Nemipterus tæniopterus (Cuvier & Valenciennes). Manila (Jordan & Seale, A); San Fabian (Evermann & Seale, A).
  (Synagris notatus Day.)
- 342. Nemipterus isacanthus (Bleeker). Negros (Jordan & Seale, A).
- 343. Nemipterus metopias (Bleeker). Cavite (Jordan & Seale, A).
- 344. Nemipterus luteus (Bloch). Cavite (Jordan & Seale, A).
- 345. Nemipterus tolu (Cuvier & Valenciennes). Cavite (Jordan & Seale, A).
- 346. Nemipterus nemurus (Bleeker). Jolo (Evermann & Seale, A).
- 347. Nemipterus worcesteri Evermann & Seale, A. Bacon (Evermann & Seale, A).

Nemipterus worcesteri Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 81, fig. 14; Bacon, P. I.

### GYMNOCRANIUS Klunzinger.

348. Gymnocranius lethrinoides (Bleeker). Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).

### PINJALO Bleeker.

349. Pinjalo pinjalo (Bleeker). San Fabian; (Pinjalo typus Bleeker) Bulan (Evermann & Seale, A); Cavite (Jordan & Seale, A).

It is not certain whether the name Casio pinjalo Bleeker 1850 is older than the name Pinjalo typus, given by the same author at about the same time.

### CÆSIO Cuvier.

- 250. Cæsio erythrogaster (Kuhl & Van Hasselt). Zamboanga (Seale & Bean).
- 351. Cæsio chrysozona Kuhl & Van Hasselt. Bacon (Evermann & Seale, A).

- 352. Cæsio cærulaureus (Lacépède). Bacon; Zamboanga; San Fabian (Evermann & Seale, A).
- 353. Cæsio cuning (Bloch). Bacon; Zamboanga (Evermann & Seale, A).
- 354. Cæsio lunaris (Ehrenberg). Zamboanga (Seale & Bean).

# Family THERAPONIDÆ.

## THERAPON 1 Cuvier.

- 355. Therapon cancellatus (Cuvier & Valenciennes). Samar; Leyte (Peters, C); Mindoro (Jordan & Richardson).
- 356. Therapon quadrilineatus (Bloch). Manila (Kner; Jordan & Seale, A);
  Bulan; San Fabian (Evermann & Seale, A); Cuyo; Lubang; Iloilo;
  Aparri (Jordan & Richardson).
- 357. Therapon theraps (Cuvier & Valenciennes). Philippine Islands (Günther); Philippines, Sta. 203 (Günther, A); Panay (Jordan & Seale, A); Bulan; Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 358. Therapon jarbua (Forskål). Cavite (Jordan & Seale, A): Negros (Jordan & Seale, B); Bulan; San Fabian (Evermann & Seale, A); Manila (Evermann & Seale, B); Mindanao (Smith & Seale); Manila; Calayan; Ticao (Jordan & Richardson); Zamboanga (Seale & Bean).
- 359. Therapon puta (Cuvier & Valenciennes). Cavite (Jordan & Seale, A);
  Bulan; Bacon; San Fabian (Evermann & Seale, A); Iloilo; Manila
  (Jordan & Richardson).
- 360. Therapon brachycentrus (Peters). Luzon (Peters, C and D). Therapon brevispinis Peters, Monatsber. Akad. Wiss. Berl., 1868, 256 Luzon, P. I.
  - Therapon brachycentrus Peters, Monatsber. Akad. Wiss. Berl., 1869, 705 (substitute for Therapon brevispinis, preoccupied).

#### HELOTES Cuvier.

361. Helotes sexlineatus (Quoy & Gaimard). Manila (Kner; Jordan & Richardson).

## POMADASIS Lacépède.

- 362. Pomadasis hasta (Bloch). Philippine Islands (Günther); Mindanao (Smith & Seale); Zamboanga (Seale & Bean).
- 363. Pomadasis maculatus (Bloch). Cavite (Jordan & Seale, A); San Fabian (Evermann & Seale, A); Manila (Jordan & Richardson).
- 364. Pomadasis argenteus (Lacépède). Cavite (Jordan & Seale, A); Manila (Evermann & Seale, B; Jordan & Richardson).
- 365. Pomadasis argyreus (Cuvier & Valenciennes). Manila (Jordan & Richardson).
  - (=Pomadasis guoraka of Day, not of Bleeker).
- 366. Pomadasis niger (Cuvier & Valenciennes). Manila (Cuvier & Valenciennes; Günther).

#### SCOLOPSIS Cuvier.

- 367. Scolopsis vosmeri Bleeker. Manila (Jordan & Seale, A).
- 368. Scolopsis ciliata (Lacépède). Manila (Jordan & Seale, A); Negros (Jordan & Seale, B).

<sup>&</sup>lt;sup>1</sup> Originally printed *Terapon*; an "error of transcription," later corrected to *Therapon*.

- 369. Scolopsis bimaculatus (Rüppell). Zamboanga (Seale & Bean).
- 370. Scolopsis monogramma (Kuhl & Van Hasselt). Philippines, Sta. 203 (Günther, A); Bulan (Evermann & Seale, A).
- 371. Scolopsis cancellata (Cuvier & Valenciennes). Bacon; Bulan (Evermann & Seale, A); Cuyo (Jordan & Richardson); Zamboanga (Seale & Bean).
- 372. Scolopsis margaritifera (Cuvier & Velenciennes). Bacon; Bulan (Evermann & Seale, A).
- 373. Scolopsis bilineata (Bloch). Bulan (Evermann & Seale, A).
- 374. Scolopsis Iuzonia Jordan & Seale. Cavite (Jordan & Seale, A); Bacon; San Fabian (Evermann & Seale, A).
  - Scolopsis luzonia Jordan & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 23, fig. 8; Cavite, P. I.
- 375. Scolopsis bulanensis Evermann & Seale. Bulan (Evermann & Seale, A).
  Scolopsis bulanensis Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906,
  85, fig. 15; Bulan, P. I.

#### PENTAPUS Cuvier & Valenciennes.

- 376. Pentapus vittatus (Bloch). Philippines (Jordan & Seale, A).
- 377. Pentapus setosus Cuvier & Valenciennes. Bulan; Jolo (Evermann & Seale A).
- 378. Pentapus caninus (Cuvier & Valenciennes). Bacon (Evermann & Seale, A); Cuyo; Cuyu (Jordan & Richardson).
- 379. Pentapus nemurus (Bleeker). Zamboanga (Seale & Bean).

# PLECTORHYNCHUS Lacépède.

- 380. Plectorhynchus orientalis (Bloch). Calayan (Jordan & Richardson).
- 381. Plectorhynchus lineatus (Linnæus) Aparri (Jordan & Richardson).
- 382. Plectorhynchus goldmanni (Bleeker). Jolo; San Fabian (Evermann & Seale, A).
- 383. Plectorhynchus celebicus Bleeker. Jolo (Evermann & Seale, A).
- 384. Plectorhynchus chrysotænia (Bleeker). Bulan (Evermann & Seale, A).
- 385. Plectorhynchus hæmatochir (Bleeker). Zamboanga (Seale & Bean).

## SPILOTICHTHYS Fowler.

386. Spilotichthys pictus (Thunberg). Cavite (Jordan & Seale, A); Bulan; Jolo (Evermann & Seale, A).

#### **EUELATICHTHYS** Fowler.

387. Euelatichthys crassispinus (Rüppell). Cavite (Jordan & Seale, A); Manila (Evermann & Seale, A); Zamboanga (Seale & Brown).

## HAPALOGENYS Richardson.

388. Hapalogenys meyeni Peters. Manila (Peters, B).
Hapalogenys meyeni Peters, Monatsber. Akad. Wiss. Berl., 1866, 96; Manila, P. I.

# Family SPARIDÆ.

#### LETHRINELLA Fowler.

389. Lethrinella miniata (Forster) Zamboanga, (Seale & Bean).

#### LETHRINUS Cuvier.

- 390. Lethrinus harak (Forskål). Bacon; San Fabian; Jolo (Evermann & Seale, A); Zamboanga, (Seale & Bean).
- 391. Lethrinus bonhamensis (Günther). Negros (Jordan & Seale, B).
- 392. Lethrinus amboinensis Bleeker. Cavite (Jordan & Seale, A).
- 393. Lethrinus mahsena (Forskål). Philippine Islands (Günther, D; Evermann & Seale, A, Lethrinus hypselopterus).
- 394. Lethrinus mahsenoides Ehrenberg. Philippine Islands (Günther); Philippines (Jordan & Seale, A); Evermann & Seale, A); Jolo (Evermann & Seale, B); Cuyo (Jordan & Richardson); Zamboanga, (Seale & Bean).
- 395. Lethrinus moensii Bleeker. Bacon (Evermann & Seale, A); Jolo (Evermann & Seale, B); Calayan (Jordan & Richardson).
- 396. Lethrinus ornatus Cuvier & Valenciennes. Bulan (Evermann & Seale, A).
- 397. Lethrinus variegatus Ehrenberg. San Fabian (Evermann & Seale, A).
- 398. Lethrinus nematacanthus Bleeker. Bulan (Evermann & Seale, A).
- 399. Lethrinus jagorii Peters. Luzon (Peters, C). Lethrinus jagorii Peters, Monatsber. Akad. Wiss. Verl., 1868, 257; Luzon, P. I.
- 400. Lethrinus richardsoni Günther. Bacon (Evermann & Seale, A); Manila (Kner, Lethrinus hæmatopterus).
  - (Not Lethrinus hamatopterus of Temminck & Schlegel). Zamboanga (Seale & Bean).
- 401. Lethrinus xanthotænia (Bleeker). Zamboanga (Seale & Bean).

# SPARUS Linnæus. (Chrysophrys Cuvier & Valenciennes).

- 402. Sparus calamara Russell. Bulan (Evermann & Seale, A).
- 403. Sparus berda Forskål. Manila (Kner, Chrysophrys hasta).

## Family KYPHOSIDÆ.

## KYPHOSUS Lacépède.

404. Kyphosus cinerascens (Forskål). Philippine Islands (Günther, Pimelepterus tahmel); Calayan (Jordan & Richardson).

## Family MÆNIDÆ.

## EMMELICHTHYS Richardson.

405. Emmelichthys leucogrammicus (Bleeker). Bulan; Bacon (Evermann & Seale, A).

# Family GERRIDÆ.

# XYSTÆMA Jordan & Evermann.

- 406. Xystæma punctatum (Cuvier & Valenciennes). Philippine Islands (Günther); Cavite (Jordan & Seale, A); Negros, (Jordan & Seale, B); Calayan; Aparri; Iloilo; Zamboanga (Seale & Bean); (Jordan & Richardson); Bulan (Evermann & Seale, A); Samar (Peters, C, Gerres filamentosus).
- 407. Xyxtæma kapas (Bleeker). Cuyo (Jordan & Richardson); Bacon; Bulan; Jolo (Evermann & Seale, A); Zamboanga, (Seale & Bean).

- 408. Xystæma philippinum (Günther). Philippine Islands (Günther).
- 409. Xystæma baconensis Evermann & Seale. Bacon; Jolo (Evermann & Seale, A).
  - Xystæma baconensis Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 69, fig. 8; Bacon and Jolo, P. I.
- 410. Xystæma oyena (Forskål). Zamboanga (Seale & Bean).

## PENTAPRION Bleeker.

411. Pentaprion longimanus (Cantor). Cavite (Jordan & Seale, A).

# Family MULLIDÆ.

## UPENEUS 1 Cuvier.

- 412. Upeneus barberinus (Lacépède). Iloilo (Jordan & Seale, A); Negros (Jordan & Seale, B); Cuyo (Jordan & Richardson); San Fabian; Bacon (Evermann & Seale, A).
- 413. Upeneus indicus (Shaw). Iloilo (Jordan & Seale, A); Bacon; Bulan (Evermann & Seale, A).
- 414. Upeneus malabaricus (Cuvier & Valenciennes). Philippine Islands (Günther).
- 415. Upeneus chryseredros (Lacépède). Cagayancillo (Jordan & Richardson).
- 416. Upeneus bifasciatus (Lacépède). Bacon (Evermann & Seale, A).
- 417. Upeneus luteus (Cuvier & Valenciennes). Jolo (Evermann & Seale, A).
- 418. Upeneus spilurus (Bleeker). Bulan (Evermann & Seale, A).
- 419. Upeneus moana (Jordan & Seale). Bacon (Evermann & Seale, A); Zamboanga, (Seale & Bean).
  - Pseudupeneus moana Jordan & Seale, Bull. U. S. Bur. Fish XXV, 1905, 274; Samoa.

#### MULLOIDES Bleeker.

- 420. Mulloides auriflamma (Forskål). Negros (Jordan & Seale, B).
- 421. Mulloides vanicolensis (Cuvier & Valenciennes). Zamboanga (Evermann & Seale, A).
- 422. Mulloides japonicus (Houttuyn). Bulan (Evermann & Seale, A).
- 423. Mulloides samoensis Günther. San Fabian; Bacon (Evermann & Seale, A).

  Mulloides samoensis Günther, Südsee, 57, pl. 43 fig. B; Apia, Samoa.

#### UPENOIDES Bleeker.

- 424. Upeneoides vittatus (Forskål). Philippine Islands (Günther); Lubang; Iloilo (Jordan & Richardson); Mindanao (Smith & Seale); Zamboanga (Seale & Bean).
- 425. Upeneoides tragula (Richardson). Philippine Islands (Günther); Iloilo (Jordan & Seale, A); Negros (Jordan & Seale, A); Cuyu; Cuyo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 426. Upeneoides Iuzonius (Jordan & Seale). Cavite (Jordan & Seale, A);
  Manila (Jordan & Richardson).
  - Upeneus luzonius Jordan & Seale. Bull. U. S. Bur. Fish, XXVI, 1906, 26 fig. 9; Cavite, P. I.

<sup>&</sup>lt;sup>1</sup> Under the rules of the International Code of Zöological Nomenclature Mullus bifasciatus Lacépède is the type of Upeneus.

- 427. Upenoides sulphureus (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A).
- 428. Upeneoides sundaicus (Bleeker). Bacon (Evermann & Seale, A).

## Family SCIÆNIDÆ.

#### UMBRINA Cuvier.

- 429. Umbrina dussumieri Cuvier & Valenciennes. Cavite (Jordan & Seale, A);
  Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A).
- 430. Umbrina russelli Cuvier & Valenciennes. Cavite (Jordan & Seale, A); San Fabian (Evermann & Seale, A).

#### PSEUDOSCIÆNA Bleeker.

431. Pseudosciæna anea (Bloch). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson).

#### JOHNIUS Bloch & Schneider.

432. Johnius belengeri (Cuvier & Valenciennes). Manila (Kner); San Fabian (Evermann & Seale, A).

## OTOLITHES 1 (Cuvier) Oken.

- 433. Otolithes argenteus Kuhl & Van Hasselt. Bacon (Evermann & Seale, A).
- 434. Otolithes leuciscus Günther. Manila (Günther, C).

Otolithus leuciscus Günther, An. Mag. N. H., 1872, 398; Manila, P. I.

## Family SILLAGINIDÆ.

# SILLAGO Cuvier.

- 435. Sillago sihama (Forskål). Philippine Islands (Günther); Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Manila; Aparri (Jordan & Richardson).
- 436. Sillago macrolepis Bleeker. Bulan (Evermann & Seale, A).
- 437. Sillago maculata Quoy & Gaimard. Manila (Kner).

# Family PSEUDOCHROMIDÆ.

## PSEUDOCHROMIS Rüppell.

- 438. Pseudochromis adustus Müller & Troschel. Philippine Islands (Müller & Troschel, Günther).
- 439. Pseudochromis tapeinosomus (Bleeker) Negros (Jordan Seale, B).
  - DAMPIERIA <sup>2</sup> Castelnau (1875). (Cichlops Müller & Troschel, preoccupied; Labracinus Schlegel, Gill.)
- 440. Dampieria spiloptera (Bleeker). Calayan; Fuga (Jordan & Richardson).
- 441. Dampieria melanotænia (Bleeker). Cuyo (Jordan & Richardson); Bulan (Evermann & Seale, A).
- 442. Dampieria trispilos (Bleeker). Bacon (Evermann & Seale, A).

<sup>&</sup>lt;sup>1</sup> This name first appeared in systematic zoölogy as Otolithes, not as Otolithus.

<sup>&</sup>lt;sup>2</sup> See Ogilby, Ann. Queensland Mus. 1908, p. 35.

# Family OPISTHOGNATHIDÆ.

## GNATHYPOPS Gill.

- 443. Gnathypops macrolepis (Peters). Philippine Islands, Sta. 201, 82 fathoms (Günther, A).
  - Opisthognathus macrolepis Peters, Monatsber, Ak. Wiss. Berl., 1866, 520; Bangkok.
- 444. Gnathypops dendritica Jordan & Richardson. Cuyo (Jordan & Richardson).
  - Gnathypops dendritica Jordan & Richardson, Bull. U. S. Bur. Fish, XXVII, 262, 1908. Cuyo, P. I.

# Family CHAMPSODONTIDÆ.

# CHAMPSODON Günther.

445. Champsodon vorax Günther. Philippine Islands, Sta. 204, 115 fathoms (Günther).

Champsodon vorax Günther, Proc. Zool. Soc. Lond., 1867, 102; no loc.

# Family CEPOLIDÆ.

## ACANTHOCEPOLA Bleeker.

446. Acanthocepola abbreviata (Cuvier & Valenciennes). Cavite (Jordan & Seale, A).

## Family OPHICEPHALIDÆ.

## OPHICEPHALUS Bloch.

- 447. Ophicephalus striatus Bloch. Manila (Cuvier & Valenciennes, Coll M. Mertens); Philippine Islands (Günther) Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Philippines (Evermann & Seale, A); Siassi Island (Evermann & Seale, B); Lake Buhi, Luzon (Smith).
- 448. Ophicephalus melanosomus Bleeker. Balabac (Boulenger, A).
- 449. Ophicephalus melanopterus Bleeker. Mindanao (Smith & Seale).
- 450. Ophicephalus vagus Peters. Luzon; Samar; Leyte (Peters, C); Manila (Günther, A).
  - Ophicephalus vagus Peters, Monatsber, Ak. Wiss. Berl., 1868, 260; Luzon; Samar; Leyte, P. I.
- 451. Ophicephalus maculatus Cuvier & Valenciennes. Manila P. I. (Kner).

## Family ANABANTIDÆ.

## ANABAS Cuvier.

452. Anabas testudineus (Bloch, 1792) Manila (Cuvier & Valenciennes, A. scandens, after a drawing made by Russian Expedition); Philippine Islands (Günther, A. scandens); Luzon; Leyte (Peters, C); Negros (Jordan & Seale, B); Sibuyan (Jordan & Richardson); Lake Buhi, Luzon (Smith, A. scandens); Mindanao (Smith & Seale, A. scandens.) This name is earlier than that of Perca scandens Daldorff, 1797.

# Family POMACENTRIDÆ.

## PREMNAS Cuvier.

453. Premnas biaculeatus (Bloch). Philippine Islands (Günther).

## AMPHIPRION Bloch & Schneider.

454. Amphiprion boholensis Cartier. Bohol (Cartier).

Amphiprion boholensis Cartier, Verh. Ges. Würzburg, 1873, 102; Bohol,
P. I.

## POMACENTRUS Lacépède.

- 455. Pomacentrus tripunctatus Cuvier & Valenciennes. Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A); (?) Palawan (Vaillant P. trillineatus).
- 456. Pomacentrus trimaculatus Cuvier & Valenciennes. Bacon; San Fabian (Evermann & Seale, A).
- 457. Pomacentrus nigricans Lacépède. Calayan; Cagayancillo (Jordan & Richardson).
- 458. Pomacentrus albofasciatus Schlegel. Calayan. (Jordan & Richardson).
- 459. Pomacentrus lividus (Forster); Negros (Jordan & Seale, B).
- 460. Pomacentrus chrysopæcilus Kuhl & Van Hasselt. Cuyo (Jordan & Richardson; as *Pomacentrus pristiger* Cuv. & Val.).
- 461. Pomacentrus littoralis Kuhl & Van Hasselt. Cavite (Jordan & Richardson; Bacon (Evermann & Seale, A).
- 462. Pomacentrus emarginatus Cuvier & Valenciennes; Negros (Jordan & Seale, B., P. delurus); Ticao; Cuyo (Jordan & Richardson).
  - Pomacentrus delurus Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 783, fig. 6; Negros, P. I.
- 463. Pomacentrus moluccensis Bleeker. Bacon (Evermann & Seale, A).
- 464. Pomacentrus alexandræ Evermann & Seale. Bacon (Evermann & Seale, A).
  - Pomacentrus alexandræ Evermann & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 91, fig. 17; Bacon, P. I.
- 465. Pomacentrus popei Evermann & Seale. Bacon (Evermann & Seale, A).
  Pomacentrus popei Evermann & Seale, Bull. U. S. Fish Comm., XXVI,
  1906, 90, fig. 16; Bacon, P. I.
- 466. Pomacentrus philippinus Evermann & Seale. Bacon (Evermann & Seale, A).
  - Pomacentrus philippinus Evermann & Seale, Bull. U. S. Bur. Fish, XXVI, 1906, 92, fig. 18; Bacon, P. I.
- 467. Pomacentrus punctatolineatus Cartier. Bohol (Cartier).

  Pomacentrus punctatolineatus Cartier, Verh. Ges. Würzburg, 1873, 98;

  Bohol, P. I.
- 468. Pomacentrus ovoides Cartier. Bohol; Cavite (Cartier).
  Pomacentrus ovoides Cartier, Verh. Ges. Würzburg, 1873, 98; Bohol;
  Cavite, P. I.
- 469. Pomacentrus jerdoni Day. Bulan (Evermann & Seale, A).
- 470. Pomacentrus fasciatus Cuvier & Valenciennes. Philippine Islands (Günther); Ticao (Jordan & Richardson).
- 471. Pomacentrus tæniurus Bleeker. Bohol (Cartier, var.); Philippines (Evermann & Seale, A).
- 472. Pomacentrus pavo Bloch. Cebu (Cartier, var?).

## ABUDEFDUF Forskål. (=Glyphisodon Lacépède.)

- 473. Abudefduf septemfasciatus (Cuvier & Valenciennes). Philippine Islands (Günther); Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 474. Abudefduf curação (Bloch). Bacon (Evermann & Seale, A).

- 475. Abudefduf saxatilis (Linnaeus). Manila (Jordan & Seale, A); Manila; Calayan (Jordan & Richardson).
- 476. Abudefduf sexfasciatus (Lacépède).¹ Luzon (Peters, C). (Glyphisodon cœlestinus Cuv. & Val.)
- 477. Abudefduf dicki (Lienard). Cagayancillo (Jordan & Richardson).
- 478. Abudefduf glaucus (Cuvier & Valenciennes). Cagayancillo; Ticao (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 479. Abudefduf amabilis (De Vis). Calayan (Jordan & Richardson).
- .480. Abudefduf unimaculatus (Cuvier & Valenciennes). Negros (Jordan & Seale, B); Calayan; Cagayancillo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 481. Abudefduf turchesius Jordan & Seale. Cavite (Jordan & Seale, A):
- 482. Abudefduf bankieri (Richardson). Bacon (Evermann & Seale, A).
- 483. Abudefduf cyaneus (Quoy & Gaimard). Bacon (Evermann Seale, A). (Identification perhaps questionable.)
- 484 (485). Abudefduf xanthurus (Bleeker). Bacon (Evermann & Seale, A).
- 486. Abudefduf mutabilis (Cartier). Cebu (Cartier).

  Glyphidon mutabilis Cartier, Verh. Ges. Würzburg, 1873, 100; Gebu, P. I.
- 487. Abudefduf tænioruptus Cartier. Bohol (Cartier).

  Glyphidon tænioruptus Cartier, Verh. Ges. Würzburg, 1873, 101; Bohol,

  P. I.
- 488. Abudefduf cingulatus (Kner). Bohol (Cartier).

  Glyphidodon cingulatus Kner, Sitsungsber. Ak. Wiss. Wien., Bd. 56, 725.
- 489. Abudefduf uniocellatus (Quoy & Gaimard). Philippine Islands (Günther, as Glyphidodon assimilis); Luzon (Peters, C, Glyphidodon assimilis, var.)
- 490. Abudefduf brownriggi (Bennett). Ticao (Jordan & Richardson).
- 491. Abudefduf antjerius (Kuhl & Van Hassett). Samar (Peters, C); Ticao; Calayan (Jordan & Richardson); Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 492. Abudefduf zonatus (Cuvier & Valenciennes). Cagayancillo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 493. Abudefduf sapphirus Jordan & Richardson. Ticao (Jordan & Richardson). (Abudefduf sapphirus Jordan & Richardson Bull. U. S. Bur. Fish., XXVII, 264, 1908, Ticao, P. I.)

## DASCYLLUS Cuvier.

- 494. Dascyllus melanurus Bleeker. Cagayancillo (Jordan & Richardson).
- 495. Dascyllus aruanus (Linnaeus). Cavite (Jordan & Seale, A).
- 496. Dascyllus trimaculatus (Rüppell). Manila (Jordan & Richardson).
- 497. Dascyllus reticulatus Richardson. Bohol. (Cartier).

## Family LABRIDÆ.

## CHŒRODON Bleeker.

- 498. Chœrodon anchorago (Bloch). Manila (Jordan & Seale, A); Bacon; Jolo (Evermann & Seale, A); Cuyo (Jordan & Richardson).
- 499. Chœrodon meander (Cartier). Cebu (Cartier).
  - Chærops meander Cartier, Verh. Ges. Würzburg, 1873, 102; Cebu, P. I. Probably the young of Chærodon anchorago.

<sup>&</sup>lt;sup>1</sup> The identity of Labrus sexfasciatus Lacépède with Abudefduf cœlestinus noted by Cuv. & Val., is recalled by Dr. Evermann.

- 500. Chœrodon macrodon Bleeker. Zamboanga (Seale & Bean).
- 501. Chœrodon oligacanthus (Bleeker). Iloilo (Jordan & Richardson).
- 502. Cherops schenleini (Agassiz). Negros (Jordan & Seale, B).
- 503. Chœrodon unimaculatus (Cartier). Cavite (Cartier).

Chærops unimaculatus Cartier, Verh. Ges. Würzburg, 1873, 102; Cavite, P. I. (Probably equals C. schænleini of Bleeker; not of Agassiz.)

504. Chœrodon zamboangæ (Seale & Bean). Zamboanga (Seale & Bean).

## LEPIDAPLOIS Gill.

- 505. Lepidaplois mesothorax (Bloch & Schneider). Bacon (Evermann & Seale, A).
- 506. Lepidaplois macrurus (Lacépède). Manila (Jordan & Seale, A).
- 507. Lepidaplois bilunulatus (Lacépède). Zamboanga (Seale & Bean).

## LABROIDES Bleeker.

508. Labroides paradiseus Bleeker. Bacon (Evermann & Seale, A).

#### DUYMÆRIA Bleeker.

509. Duymæria flagellifera Cuvier & Valenciennes. Samboangan (Günther, A).

#### AMPHECES Jordan & Evermann.

510. Ampheces pterophthalmus (Bleeker). Cuyo (Jordan & Richardson).

#### STETHOJULIS Günther.

- 511. Stethojulis phekadopleura Bleeker. Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Cuyo; Calayan (Jordan & Richardson); Bacon (Evermann & Seale).
- 512. Stethojulis bandanensis (Bleeker). Cavite (Jordan & Seale); Negros (Jordan & Seale, B); Cuyo; Cagayancillo (Jordan & Richardson).
- 513. Stethojulis strigiventer (Bennett) Cuyo; Cuyu (Jordan & Richardson); Palawan (Vaillant).
- 514. Stethojulis kalosoma Bleeker. Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B).
- 515. Stethojulis zatima Jordan & Seale. Negros (Jordan & Seale, B); Cuyo; Calayan (Jordan & Richardson); Bacon (Evermann & Seale, A).
  Stethojulis zatima Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 788, fig. 9; Negros, P. I.

## PLATYGLOSSUS (Klein) Bleeker.

516. Platyglossus notopsis (Kuhl & Van Hasselt). Calayan (Jordan & Richardson).

## HALICHŒRES Rüppell.

- 517. Halichœres scapularis (Bennett). Manila (Jordan & Seale, A); Bacon (Evermann & Seale); Negros (Jordan & Seale, B, H. cymatogrammus); Palawan (Vaillant).
  - Halichæres cymatogrammus Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 786, fig. 8; Negros, P. I.
- 518. Halichœres centiquadrus (Bleeker). Cagayancillo (Jordan & Richardson).
- 519. Halichœres trimaculatus (Quoy & Gaimard). Cagayancillo (Jordan & Richardson).

- 520. Halichœres nigrescens (Bloch & Schneider). Manila (Jordan & Seale, A);
  Bulan (Evermann & Seale, A).
- 521. Halichœres purpurascens (Bloch & Schneider) Bacon (Evermann & Seale, A).
- 522. Halichœres polyophthalmus (Bleeker). Bacon (Evermann & Seale, A as H. guttatus); Cavite (Jordan & Seale, A, H. argus); Negros (Jordan & Seale, B, H. argus). (The early names for this species, guttatus and argus were both preoccupied.)
- 523. Halichœres leparensis (Bleeker). Bacon (Evermann & Seale, A).
- 524. Halichœres gymnocephalus (Bloch & Schneider). Philippine Islands (Bleeker, *H. modestus*, specimens in Berlin Museum); Cuyo; (Jordan & Richardson).
  - (H. modestus Bleeker; Platyglossus modestus Günther.)
- 525. Halichœres binotopsis Bleeker. Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B).
- 526. Halichœres pœcilus (Lay & Bennett). Luzon (Peters, C); Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Bacon (Evermann & Seale, A); Calayan (Jordan & Richardson).
- 527. Halichœres opercularis (Günther). Calayan (Jordan & Richardson).
- 528. Halichœres nebulosus (Cuvier & Valenciennes). Cuyo; Cuyu (Jordan & Richardson).
- 529. Halichœres miniatus (Kuhl & Van Hasselt). Luzon (Peters, C); Negros (Jordan & Seale, B); Cavite (Jordan & Seale, A); Calayan (Jordan & Richardson; Bacon (Evermann & Seale, A).
- 530. Halichœres pseudominiatus (Bleeker). Cavite (Jordan & Seale, A);
  Negros (Jordan & Seale, A).
- 531. Halichœres hyrtli Bleeker. Manila (Jordan & Seale, A).
- 532. Halichœres alternans (Cartier). Cebu; Panglao (Cartier).
  Platyglossus alternans Cartier, Verh. Ges. Würzburg, 1873, 104; Cebu
  & Panglao, P. I.
- 533. Halichœres ubayensis (Cartier). Bolo (Cartier).
  (Platyglossus ubayensis Cartier, Verh. Ges. Würzburg, 1873, 104; Bohol,
  P. I.)
- 534. Halichœres pseudogramma (Cartier). Bohol (Cartier).
  (Platyglossus pseudogramma Cartier, Verh. Ges. Würzburg, 1873, 103;
  Bohol, P. I. (Name changed to P. pseudogrammicus by Palacky.)
- 535. Halichœres reticulatus (Cartier). Cebu (Cartier).
  Platyglossus reticulatus Cartier, Verh. Ges. Würzburg, 1873, 104, Ccbu,
  P. I.

## CHEILIO Lacépède.

536. Cheilio inermis (Forskål). Philippine Islands (Günther). Negros (Jordan & Seale, B); Bacon (Evermann & Seale, A); Cuyo (Jordan & Richardson); Zamboanga (Seale & Bean).

## THALASSOMA Swainson. (Julis Günther; not of Cuvier.)

- 537. Thalassoma dorsale (Quoy & Gaimard). Philippine Islands (Günther);
  Manila (Jordan & Seale, A); Cagayancillo (Jordan & Richardson).
- 538. Thalassoma güntheri (Bleeker). Calayan (Jordan & Richardson).
- 539. Thalassoma umbrostigma (Rüppell). Calayan (Jordan & Richardson).
- 540. Thalassoma lunare (Linnæus). Cavite (Jordan & Seale, A); Bacon (Evermann & Seale, A).
- 541. Thalassoma truncatum Cartier. Cebu (Cartier).
  (Julis truncatus Cartier, Verh. Ges. Würzburg, 1873, 104; Cebu, P. I.)

## CHEILINUS Lacépède.

- 542. Cheilinus digrammus (Lacépède). Romblon (Jordan & Richardson).
- 543. Cheilinus oxycephalus Bleeker. Cuyo (Jordan & Richardson).
- 544. Cheilinus trilobatus (Lacépède). Manila (Jordan & Seale, A); Zamboanga (Seale & Bean).
- 545. Cheilinus rostratus Cartier. Cebu (Cartier); Panay (Jordan & Seale, A). (Cheilinus rostratus Cartier, Verh. Ges. Würzburg, 1873, 103; Cebu, P. I.)
- 546. Cheilinus fasciatus (Bloch). Bacon (Evermann & Seale, A).

# THALLIURUS Swainson.

547. Thalliurus chlorurus (Bloch). Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).

## NOVACULICHTHYS Bleeker.

- 548. Novaculichthys macrolepidotus (Bloch). Negros (Jordan & Seale, B);
  Bacon (Evermann & Seale, A).
- 549. Novaculichthys kallosomus (Bleeker). Negros (Jordan & Seale, B).
- 550. Novaculichthys tæniurus (Lacépède). Cagayancillo (Jordan & Richardson).

## HEMIPTERONOTUS Lacépède.

551. Hemipteronotus pentadactylus (Lacépède). Manila (Jordan & Seale, A).

# Family ODACIDÆ.

## PSEUDODAX Bleeker.

552. Pseudodax moluccanus (Cuvier & Valenciennes). Bohol (Cartier, spelled moluccensis).

# Family SCARICHTHYIDÆ.

# SCARICHTHYS Bleeker.

- 553. Scarichthys auritus (Kuhl & Van Hasselt). Cagayancillo (Jordan & Richardson); Bacon (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 554. Scarichthys cœruleopunctatus (Rüppell). Bacon; Bulan; Jolo (Evermann & Seale, A); Zamboanga (Seale & Bean).

### **CALOTOMUS** Gilbert.

- 555. Calotomus genistriatus (Cuvier & Valenciennes). Zamboanga; Jolo (Evermann & Seale, A).
- 556. Calotomus vaigiensis (Quoy & Gaimard). Negros (Jordan & Seale, B).
- 557. Calotomus moluccensis (Bleeker). Negros (Jordan & Seale, B); Cuyo (Jordan & Richardson).

## CALLYODON Gronow. (Scarus Forskål; not of Gronow.)

- 558. Callyondon balinensis (Bleeker). Bacon (Evermann & Seale A).
- 559. Callyodon oktodon (Bleeker). Zamboanga (Evermann & Seale, A).
- 560. Collyodon lacerta (Cuvier & Valenciennes). Bulan; Bacon (Evermann & Seale, A); Panay (Jordan & Seale, A).
- 561. Callyodon quoyi (Cuvier & Valenciennes). Bacon (Evermann & Seale, A).

- 562. Callyondon muricatus (Cuvier & Valenciennes). Negros (Jordan & Seale, B).
- 563. Callyodon margaritus (Cartier). Cebu (Cartier).
  Pseudoscarus margaritus Cartier, Verh. Ges. Würzburg, 1873, 105; Cebu,
  P. I.
- 564. Callyodon æruginosus (Cuvier & Valenciennes). Manila (Kner).
- 565. Callyodon eleræ Jordan & Seale. Cavite (Jordan & Seale, A).
  Callyodon elerae Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 31, fig. 11; Cavite, P. I.
- 566. Callyodon capistratoides (Bleeker). Cagayancillo (Jordan & Richardson).
  - (Pseudoscarus dussumieri Bleeker. Not Scarus dussumieri (Cuvier & Valenciennes).)
- 567. Callyodon latifasciatus Seale & Bean. Zamboanga (Seale & Bean).
- 568. Callyodon niger (Rüppell). Zamboanga (Seale & Bean).
- 569. Callyodon macrorhinus (Bleeker). Zamboanga (Seale & Bean).
- 570. Callyodon rivulatus (Cuvier & Valenciennes). Zamboanga (Seale & Bean).
- 571. Callyodon zonularis Jordan & Seale. Zamboanga (Seale & Bean).

# Family TOXOTIDÆ.

#### TOXOTES Cuvier.

572. Toxotes jaculatrix (Pallas). Samar (Peters, C, Toxotes jaculator); Mindoro (Jordan & Richardson); Palawan (Vaillant); Zamboanga (Seale & Bean).

# Family SCATOPHAGIDÆ.

## SCATOPHAGUS Cuvier & Valenciennes.

573. Scatophagus argus (Gmelin). Luzon (Peters, C); Cavite (Jordan & Seale, E); Negros (Jordan & Seale, B); Manila; Iloilo (Jordan & Richardson); Bacon, San Fabian (Evermann & Seale, A); Mindanao (Smith & Seale); Zamboanga (Seale & Bean).

## Family DREPANIDÆ.

## DREPANE Cuvier & Valenciennes.

574. Drepane punctata (Gmelin). Philippine Islands (Günther); Cavite (Jordan & Seale, A); Manila; Lubang (Jordan & Richardson).

# Family PLATACIDÆ.

## PLATAX Cuvier.

575. Platax orbicularis (Forskål). Philippine Islands (Günther, as *Platax* vespertilio); Panay (Jordan & Seale, A); Ticao; Cagayancillo (Jordan & Richardson); Jolo (Evermann & Seale, A); Zamboanga (Seale & Bean).

## Family SCORPIDÆ.

# MONODACTYLUS Lacépède.

576. Monodactylus argenteus (Linnæus). Cavite (Jordan & Seale, A); Aparri; lloilo; Calayan (Jordan & Richardson); Bulan (Evermann & Seale, A).

# Family CHÆTODONTIDÆ.

## PARACHÆTODON Bleeker.

- 577. Parachætodon ocellatus (Cuvier & Valenciennes). Philippine Islands (Günther, Chætodon oligacanthus); Negros (Jordan & Seale, B). (Chætodon oligacanthus Bleeker.)
- 578. Parachætodon biocellatus (Cuvier & Valenciennes). Cavite (Jordan & Seale, A).

#### GONOCHÆTODON Bleeker.

579. Gonochætodon triangulum (Cuvier & Valenciennes). Philippines (Jordan & Seale, A); Cagayancillo (Jordan & Richardson).

## CHÆTODON Linnaeus.

- 580. Chætodon setifer Forskål. Cagayancillo (Jordan & Richardson); Palawan (Villant).
- 581. Chætodon auriga Forskål. Bacon (Evermann & Seale, A).
- 582. Chætodon unimaculatus Bloch. Bacon (Evermann & Seale, A).
- 583. Chætodon kleini Bloch. Manila (Jordan & Seale, A); Cagayancillo (Jordan & Richardson).
- 584. Chætodon ephippium Cuvier & Valenciennes. Cagayancillo (Jordan & Richardson).
- 585. Chætodon punctatofasciatus Cuvier & Valenciennes. Manila (Jordan & Seale, A).
- 586. Chætodon citrinellus (Broussonet). Cagayancillo (Jordan & Richardson).
- 587. Chætodon trifasciatus Park. Cavite (Jordan & Seale, A); Cagayancillo (Jordan & Richardson).
- 588. Chætodon ornatissimus (Cuvier & Valenciennes). Manila (Jordan & Seale, A).
- 589. Chætodon vagabundus Linnæus. Bacon (Evermann & Seale, A).
- 590. Chætodon octofasciatus Bloch. Bacon (Evermann & Seale, A).
- 591. Chætodon selene Bleeker. Bulan (Evermann & Seale, A).
- 592. Chætodon falcula Bloch. Bacon (Evermann & Seale, A).

#### CHELMON Cuvier.

593. Chelmon rostratus (Linnæus). Luzon (Peters, C); Cavite (Jordan & Seale, A).

## HENIOCHUS Cuvier & Valenciennes.

- 594. Heniochus acuminatus (Linnaus). Manila (Cuvier & Valenciennes), fide Dussumier, as Heniochus macrolepidotus); Bacon; San Fabian (Evermann & Seale, A).
  - (Chætodon macrolepidotus Linnæus.)
- 595. Heniochus varius (Cuvier & Valenciennes). Bacon (Evermann & Seale, A).

## HOLACANTHUS Lacépède.

- 596. Holacanthus bicolor (Bloch). Manila (Jordan & Seale, A); Cagayancillo (Jordan & Richardson).
- 597. Holacanthus diacanthus (Boddært). Manila (Jordan & Seale, A).
- 598. Holacanthus nicobariensis (Bloch & Schneider). Palawan (Vaillant).

## Family ZANCLIDÆ.

## ZANCLUS Commerson) Lacépède.

599. Zanclus cornutus (Linnæus). Cagayancillo; Fuga (Jordan & Richarson).

# Family HEPATIDÆ.

- **HEPATUS** Gronow 1765. (*Teuthis* Linnæus 1766; *Theutis* Cuvier; *Acanthurus* Forskål, as restricted by Cuvier; *Harpurus* Forster; *Acronurus* Gronow.)
- 600. Hepatus celebicus (Bleeker). Manila (Jordan & Seale, A); Bulan (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 601. Hepatus olivaceus (Bloch & Schneider). Cagayancillo (Jordan & Richardson).
- 602. Hepatus lineatus (Gmelin). Philippine Islands (Günther); Cagayancillo (Jordan & Richardson).
- 603. Hepatus dussumieri (Cuv. & Val.). Zamboanga (Seale & Bean).
- 604. Hepatus triostegus (Linnæus). Cagayancillo (Jordan & Richardson).
- 605. Hepatus matoides (Cuvier & Valenciennes). Calayan; Aparri (Jordan & Richardson); Zamboanga; Jolo (Evermann & Seale, A).
- 606. Hepatus elongatus (Cuvier & Valenciennes). Cagayancillo (Jordan & Richardson).

## CTENOCHÆTUS Gill.

607. Ctenochætus striatus (Quoy & Gaimard). Zamboanga (Evermann & Seale, A).

#### COLOCOPUS Gill.

608. Colocopus lambdurus Gill. Zamboanga (Günther, A); Acathurus hepatus Günther, Südsee, 115, taf. 75; not Teuthis hepatus Linnæus= a West Indian species) Colocopus lambdurus Gill, Proc. U. S. Nat. Mus., 1884, 279 (after Günther); Kingsmill I., Mauritius.

#### ZEBRASOMA Swainson.

609. Zebrasoma rhombeum (Kittlitz). Cagayancillo (Jordan & Richardson).

#### MONOCEROS Bloch & Schneider.

(Naso Lacépède; Naseus Cuvier & Valenciennes. Acanthurus Forskål in part, not as restricted by Cuvier.)

- 610. Monoceros annulatus (Quoy & Gaimard). Zamboanga (Seale & Bean).
- 611. Monoceros tuberosus (Cuv. & Val). Zamboanga (Seale & Bean).
- 612. Monoceros lituratus (Forskål). Zamboanga (Seale & Bean).
- 613. Monoceros marginatus (Cuv. & Val). Zamboanga (Seale & Bean).
- 614. Monoceros unicornis (Forskål). San Fabian (Evermann & Seale, A).
- 615. Monoceros olivaceus Solander. Philippine Islands (Günther).

# Family SIGANIDÆ.

SIGANUS Forskål. (Teuthis Günther, not of Linnæus, as restricted by Cuvier, or Gill.)

- 616. Siganus javus (Linnæus). Cavite (Jordan & Seale, A); Manila; Iloilo (Jordan & Richardson); Bulan (Evermann & Seale, A).
- 617. Siganus virgatus (Cuvier & Valenciennes). Philippine Islands (Günther);
  Panay (Jordan & Seale, A); Cuyo (Jordan & Richardson); Bacon
  . (Evermann & Seale, A); Zamboanga (Seale & Bean).

- 618. Siganus lineatus (Cuvier & Valenciennes). Manila (Jordan & Seale, A); Cuyo; Aparri (Jordan & Richardson); Bulan; Bacon (Evermann & Seale, A).
- 619. Siganus oramin (Bloch & Schneider). Cavite (Jordan & Seale, A); Negros Jordan & Seale, B); Aparri; Cavite (Jordan & Richardson).
- 620. Siganus marmoratus (Quoy & Gaimard). Manila (Jordan & Seale, A); Calayan (Jordan & Richardson).
- 621. Siganus vermiculatus (Kuhl & Van Hasselt). Philippine Islands (Günther); Zamboanga; Bacon; San Fabian (Evermann & Seale, A); Zamboanga; (Seale & Bean).
- 622. Siganus tetrazonus (Bleeker). Manila (Jordan & Seale, A).
- 623. Siganus concatenatus (Cuvier & Valenciennes). Negros (Jordan & Seale, B).
- 624. Siganus corallinus (Cuvier & Valenciennes). Cagayancillo (Jordan & Richardson).
- 625. Siganus rostratus (Cuvier & Valenciennes). Fuga (Jordan & Richardson).
- 626. Siganus fuscescens (Houttuyn). Bacon; Jolo; San Fabian (Evermann & Seale, A); Zamboanga (Seale & Bean).
- 627. Siganus albopunctatus (Temminck & Schlegel). Philippine Islands (Günther); Manila (Kner).
  - LO Seale. (Lo Seale, Bull. U. S. Bur. Fish., XXV, 1905, 360 (vulpinus).)
- 628. Lo unimaculatus Evermann & Seale. Bacon (Evermann & Seale, A).
  Lo unimaculatus Evermann & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 99, fig. 19; Bacon, P. I.

# Family TRIACANTHIDÆ.

## TRIACANTHUS Cuvier.

- 629. Triacanthus strigilifer Cantor. Philippine Islands (Günther); Negros (Jordan & Seale, B).
- 630. Triacanthus oxycephalus Bleeker. Samar (Peters, C).
- 631. Triacanthus blochi Bleeker. Iloilo; Manila (Jordan & Richardson).

## Family BALISTIDÆ.

## BALISTES (Artedi) Linnæus.

- 632. Balistes flavimarginatus Rüppell. Cuyo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 633. Balistes niger Park. Bacon (Evermann & Seale, A).
- 634. Balistes chrysopterus Bloch & Schneider. Fuga (Jordan & Richardson).

#### BALISTAPUS Tilesius.

- 635. Balistapus verrucosus (Linnæus). Philippine Islands (Günther); Zebu (Günther, A); Cagayancillo (Jordan & Richardson). Zamboanga (Seale & Bean).
- 636. Balistapus undulatus (Park). Philippine Islands (Günther, A); Cavite (Jordan & Seale, A); Cagayancillo (Jordan & Richardson); Bacon (Evermann & Seale, A); (=Balistes lineatus Bleeker).
- 637. Balistapus aculeatus (Linnæus). Cuyo (Jordan & Richardson); Bacon; Zamboanga (Evermann & Seale, A).
- 638. Balistapus rectangulus (Bloch & Schneider). Calayan (Jordan & Richardson).

# Family MONACANTHIDÆ.

## CANTHERINES Swainson.

- 639. Cantherines sandwichiensis (Quoy & Gaimard). Romblon (Jordan & Richardson); Cebu (Günther, A, Monacanthus pardalis.)
- 640. Cantherines macrurus (Bleeker). Negros (Jordan & Seales, B); Bacon; Jolo (Evermann & Seale, A).
- 641. Cantherines tessellatus (Günther). Philippine Islands, Sta. 204, 115 fath. (Günther, A).

## MONACANTHUS Cuvier.

- 642. Monacanthus tomentosus (Linnæus). Cuyo; Lubang (Jordan & Richardson); Panay; Manila (Jordan & Seale, A, M. nemurus, not of Linnæus); Palawan (Vaillant).
- 643. Monacanthus chinensis (Bloch). Manila (Jordan & Seale, A); Negros (Jordan & Seale, B); Iloilo (Jordan & Richardson); Bulan (Evermann & Seale, A).
- 644. Monacanthus surothura Van Hasselt. Negros (Jordan & Seale, B); (perhaps equals Monacanthus hajam Bleeker).

#### OSBECKIA Jordan & Evermann.

645. Osbeckia scripta (Osbeck). Jolo (Evermann & Seale, A).

#### ALUTERA (Cuvier) Oken.

646. Alutera monoceros (Osbeck). Manila (Jordan & Seale, A).

# Family TETRAODONTIDÆ.

## SPHEROIDES (Lacépède) Duméril.

- 647. Spheroides lunaris (Bloch). Philippine Islands (Günther, var. spadiceus);
  Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B) Manila;
  Iloilo (Jordan & Richardson); San Fabian (Evermann & Seale, B);
  Zamboanga (Seale & Bean).
- 648. Spheroides ocellatus (Osbeck). Manila (Jordan & Seale, A); Negros (Jordan & Seale, B).
- 649. Spheroides hypselogenion (Bleeker). Bulan (Evermann & Seale, A).
- 650. Spheroides sceleratus (Forster). Philippine Islands (Günther).

#### TETRAODON Linnæus.

- 651. Tetraodon hispidus Linnæus. Manila; Panay (Jordan & Seale, A); Cuyo (Jordan & Richardson).
- 652. Tetraodon reticularis Bloch & Schneider. Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Lubang (Jordan & Richardson); Zamboanga (Seale & Bean).
- 653. Tetraodon nigropunctatus Bloch & Schneider. Bacon (Evermann & Seale,
- 654. Tetraodon immaculatus Bloch & Schneider. Philippine Islands (Günther, var. virgata; Günther, A); Manila (Procé); Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Lubang; Iloilo; Cuyu; Ticao (Jordan & Richardson); Manila (Evermann & Seale, A); Zamboanga (Seale & Bean).

655. Tetraodon fluviatilis Hamilton-Buchanan. Philippine Islands (Günther);

Manila (Procé), T. nigroviridis=fluviatilis fide Bleeker, Atlas).

## CHELONODON Müller.

656. Chelonodon patoca (Hamilton-Buchanan). Philippine Islands, Sta. 203, (Günther, A); Manila (Jordan & Richardson); Mindanao (Smith & Seale); Zamboanga (Seale & Bean).

# CANTHIGASTER Swainson.

- 657. Canthigaster compressus (Procé). Manila (Procé); Philippine Islands (Günther, Tetrodon striolatus); Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B); Philippines (Evermann & Seale, A); Zamboanga (Evermann & Seale, B); Zamboanga (Seale & Bean).
- 658. Canthigaster bennetti (Bleeker). Bacon (Evermann & Seale, A).

## Family DIODONTIDÆ.

#### DIODON Linnæus.

- 659. Diodon holacanthus Linnæus. Sulu Sea (Günther, Diodon maculatus, var.).
- 660. Diodon hystrix Linnæus. Luzon (Peters, C) Diodon punctatus.

#### CHILOMYCTERUS Bibron.

661. Chilomycterus orbicularis (Bloch). Straits near Cebu (Günther, A).

## Family OSTRACIIDÆ.

#### OSTRACION Linnæus.

- 662. Ostracion tuberculatum Linnæus. Cavite (Jordan & Seale, A); Jolo (Evermann & Seale, A).
- 663. Ostracion gibbosum Linnæus. Cavite (Jordan & Seale, A); Jolo (Evermann & Seale, A).
- 664. Ostracion cornutum Linnæus. Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B).

## Family GOBIIDÆ.

# BOSTRYCHUS Lacépède.

665. Bostrychus sinensis (Lacépède). Manila (Kner).

## VALENCIENNEA Bleeker.

- 666. Valenciennea muralis (Quoy & Gaimard). Cuvier & Valenciennes. Philippine Islands (Günther).
- 667. Valenciennea strigata (Broussonet). Bacon (Evermann & Seale, A).
- 668. Valenciennea violifera Jordan & Seale. Negros (Jordan & Seale, B).
  Valenciennea violifera Jordan & Seale, Bull. U. S. Bur. Fish. XXV, 1905, 383: Samoa.
  - Valenciennea species, Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 794; Negros.

#### **ELEOTRIS** Gronow.

669. Eleotris fusca (Bloch & Schneider). Luzon, Samar (Peters, C); Palawan (Boulenger, A); Sibuyan; Aparri (Jordan & Richardson).

#### OPHIOCARA Gill.

- 670. Ophiocara aporos (Bleeker). Samar (Peters, C); Palawan; Balabac (Boulenger, A); Mindoro; Sibuyan (Jordan & Richardson).
- 671. Ophiocara porocephala (Cuvier & Valenciennes). Philippine Islands (Günther, Eleotris ophiocephalus); Luzon (Peters, C, E. ophiocephalus); Calayan; Mindoro (Jordan & Richardson); Zamboanga (Seale & Bean). (Not Eleotris ophiocephalus of Day.)
- 672. Ophiocara laglaizi (Sauvage). Manila (Sauvage, B).

  Eleotris laglaizi Sauvage, Bull. Soc. Philomath., 1880, 54; Manila, P. I.

#### BUTIS Bleeker.

- 673. Butis butis (Hamilton-Buchanan). Philippine Islands (Günther, in part);

  ?Palawan (Boulenger, A); Manila; Iloilo (Jordan & Richardson);

  Negros (Jordan & Seale A, Butis leucurus); Cavite (Jordan & Seale, A, Butis leucurus);

  Bacon (Evermann & Seale, A, Butis leucurus);

  Palawan (Vaillant).
  - Butis leucurus Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 794, fig. 13; Negros.
- 674. Butis koilomatodon (Bleeker). Iloilo (Jordan & Richardson); Cavite (Jordan & Seale, A, Butis serrifrons).

  (Eleotris caperatus Cantor, Cat. Mal. Fishes, 1850, 1179; Sea of Pinang.)
  - (Prionobutis serrifrons Rutter, Proc. Ac. Nat. Sci. Phila., 1897, 84; Swatow, China.)
- 675. Butis amboinensis, Bleeker. Mindoro (Jordan & Richardson). (Probably not *Eleotris amboinensis* of Day.)
- 676. Butis prismaticus (Bleeker). Cuyo; Manila (Jordan & Richardson).

## **ODONTOBUTIS** Bleeker.

677. Odontobutis obscurus (Peters). Zamboanga (Seale & Bean).

## ASTERROPTERIX Rüppell. (Brachyeleotris Beeker.)

678. Asterropterix everetti Boulenger. Palawan (Boulenger, A).

(Asterropteryx everetti Boulenger, Ann. Mag. Nat. Hist. (6) XV, 186; Palawan, P. I.)

#### HYPSELEOTRIS Gill.

- 679. Hypselectris cyprincides (Cuvier & Valenciennes). Negros (Jordan & Seale, B).
  - (Not Eleotris cyprinoides of Günther=Asterropteryx güntheri Bleeker.)
- 680. Hypseleotris modestus (Bleeker). Mindoro (Jordan & Richardson).

## PERIOPHTHALMUS Bloch & Schneider.

- 681. Periophthalmus barbarus (Linnæus). Negros (Jordan & Seale, B); Ticao; Aparri (Jordan & Richardson); Panay (Jordan & Seale, A, P. chrysospilus).
  - [We are unable to separate the nominal species of this genus and think it doubtful if more than one can be defined.]

## PERIOPHTHALMODON Gill.

682. Periophthalmodon schlosseri Bloch. Cavite (Jordan & Seale, A).

## SCARTELAOS Swainson.

(Boleops Gill).

683. Scartelaos viridis (Hamilton-Buchanan). Negros (Jordan & Seale, B, fig.).

#### GNATHOLEPIS Bleeker.

- 684. Gnatholepis calliurus Jordan & Seale. Negros (Jordan & Seale, B).

  Gnatholepis calliurus Jordan & Seale, Proc., U. S. Nat. Mus., XXVIII, 1905,
  796, fig. 14; Negros.
- 685. Gnatholepis deltoides (Seale). Negros (Jordan & Seale, B).

  Gobius deltoides Seale, Occ. Papers Bishop Mus., I, 1901, No. 3, 125; Guam.
- 686. Gnatholepis (?) sternbergi (Smith). Lake Buhi, P. I. (Smith); Zamboanga (Seale & Bean).
  - OPLOPOMUS Steindachner. (Centrogobius Bleeker; not Oplopoma Girard.)
- 687. Oplopomus vergens Jordan & Seale. Cavite (Jordan & Seale, A). Oplopomus vergens Jordan & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 44, fig. 17; Cavite.
  - RUPPELLIA Swainson. (Paragobiodon Bleeker.) (Printed Ruppelia and Rupellia by Swainson by an "error in transcription.")
- 688. Ruppellia echinocephala (Rüppell). Cebu (Günther, C).
- 689. Ruppellia melanosoma (Bleeker). Luzon (Peters, C); Manila (Jordan & Seale, A, Paragobiodon).
  - DROMBUS Jordan & Seale. (Drombus Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 797 (palackyi).)
- 690. Drombus palackyi Jordan & Seale. Negros (Jordan & Seale, B); Zamboanga (Seale & Bean).
  - Drombus palackyi Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 797, fig. 15; Negros.
  - RHINOGOBIUS Gill. (Ctenogobius Jordan & Snyder, not of Gill; Coryphopterus Gill; Porogobius and Accentrogobius Bleeker.)
- 691. Rhinogobius nebulosus (Forskål). Panay; Cavite (Jordan & Seale, A, R. nebulosus and lungi); Manila; Aparri (Jordan & Richardson). Gobius criniger Cuvier & Valenciennes, and of Günther and Day. Rhinogobius lungi Jordan & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 41, fig. 13; Cavite, P. I.
- 692. Rhinogobius caninus (Cuvier & Valenciennes). Negros (Jordan & Seale, B). Iloilo; Lubang (Jordan & Richardson).
- <sup>1</sup> Dorsal V-8; Anal 8; scales 25-26; cheeks and opercles covered with large scales; teeth in upper jaw in three irregular rows; in lower jaw in a band, some canine-like; caudal bluntly rounded, not elongated; tongue not described; pectoral rays not silk-like. (Smith.)

- 693. Rhinogobius baliuroides (Bleeker). Aparri (Jordan & Richardson).
- 694. Rhinogobius calderæ (Evermann & Seale). Mindanao (Evermann & Seale, B).
  - Gobius calderæ Evermann & Seale, Proc. U. S. Nat. Mus., XXXI, 1906, 511, fig. 3; Caldera Bay, Mindanao. Since the publication of the original description, Dr. Evermann has written us that the upper pectoral rays of this species are not silk-like. It is evidently a Rhinogobius.

#### ZONOGOBIUS Bleeker.

- 695. Zonogobius semidoliatus (Cuvier & Valenciennes). Negros (Jordan & Seale, B).
  - CREISSON Jordan & Seale. (Creisson Jordan & Seale, Bull. U. S. Bur. Fish. XXVI, 1906, 43 (validus).)
- 696. Creisson validus Jordan & Seale. Cavite (Jordan & Seale, A).
  Creisson validus Jordan & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 43, fig.
  16; Cavite, P. I.
  - MISTICHTHYS Smith. (Mistichthys Smith, Bull. U. S. Bur. Fish., XXI, 1901, 167 (luzonensis).)
  - This genus seems to be chiefly distinguished by its very short and low spinous dorsal. The teeth are curved and uniserial.
- 697. Mistichthys luzonensis Smith. Lake Buhi (Smith).
  - Mistichthys luzonensis Smith, Bull. U. S. Bur. Fish., XXI, 1901, 167, fig.; Lake Buhi, P. I.

## GOBIUS (Artedi) Linnæus.

- 698. Gobius ornatus Rüppell. Philippine Islands (Günther); Luzon (Peters, C.); Ticao (Jordan & Richardson); Palawan (Vaillant).
- 699. Gobius oligolepis Bleeker. Luzon (Peters, C).
- 700. Gobius ophthalmotænia Richardson; Panay (Jordan & Seale, A).
  - MAPO Smitt. (Mapo Smitt, Afh. Vet. Kong. Ak. Stockholm, 1899, 543 (soporator).)
- 701. Mapo fuscus (Rüppell). Cavite (Jordan & Seale, A.); Zamboanga (Seale & Bean).
  - Gobius albopunctatus Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 57, 1837; Ile de France.
  - Gobius soporator Cuv. & Val.
- 702. Mapo mearnsi Evermann & Seale. Mindanao (Evermann & Seale, B).
  Mapo mearnsi Evermann & Seale. Proc. U. S. Nat. Mus., XXXI, 1906, 510, fig. 2; Zamboanga, Mindanao, P. I.

## GLOSSOGOBIUS Gill.

- 703. Glossogobius giuris (Hamilton-Buchanan). Philippine Islands (Günther); Luzon; Leyte (Peters, C); Palawan (Boulenger, A) Bacon; San Fabian; Bulan (Evermann & Seale, A); Mindanao (Smith & Seale); Mindoro; Aparri; Iloilo (Jordan & Richardson).
  - Gobius giuris (Günther), Cat. Fishes, III, 1861, 21 (in part only, Gobius fasciato-punctatus (Richardson) being identical with Glossogobius brunneus (Temminck & Schlegel)); not Gobius giuris of Rutter, which equals Glossogobius brunneus (Temminck & Schlegel); nor of Abbott, which equals Rhinogobius giurinus (Rutter).)

- 704. Glossogobius biocellatus (Cuvier & Valenciennes). Bacon (Evermann & Seale, A); Mindanao (Smith & Seale).
- 705. Glossogobius obscuripinnis (Peters). Luzon (Peters, C).

Gobius obscuripinnis Peters, Monatsber. Akad. Wiss. Berl., 1868, 263; Bicol R., Province of Albay, and creeks in Luzon.

- 706. Glossogobius aglestes Jordan & Seale. Negros (Jordan & Seale, B).
  - Glossogobius aglestes, Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 798, fig. 16; Negros. This species has the short snout and coloration (for the most part) of Glossogobius obscuripinnis Peters, and may not be different.
- 707. Glossogobius pavo (Steindachner). Philippine Islands (Steindachner, B). Gobius pavo (Glossogobius?) Steindachner S. B. Ak. Wien., 1867, 715, Philippine Islands.

Dorsal VI-1, 8, scales 31; head broad, depressed; lower jaw projecting; teeth in outer row in both jaws enlarged; pectoral without silky rays; ventrals ("ventral-scheibe") half length of head; (This apparently means that the ventrals are united.) Scales increasing in size backward; upper part of head, behind eyes, scaled, as well as upper part of opercle; rest of head naked, crossed lengthwise and crosswise by (rows of) sensory pores; color gold brown, each side with four large black spots. (Steindachner 1. c.)

ILLANA Smith & Seale. (Illana Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906, 79, (cacabet).)

708. Illana cacabet Smith & Seale. Mindanao (Smith & Seale).
Illana cacabet Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906, 79, fig;
Rio Grande in Mindanao.

## AWAOUS Steindachner.

- 709. Awaous ocellaris (Broussonet). Mindoro (Jordan & Richardson).
- 710. Awaous grammepomus (Bleeker). Palawan (Boulenger, A).
- 711. Awaous lacrymosus (Peters). Quingoa R., in Luzon (Peters, C).

AMBLYGOBIUS Bleeker. (Amblygobius Bleeker, Arch. Neerl., 1875, 322 (sphinx). Odontogobius Bleeker, Arch. Neerl., 1875, 323 (bynoensis).)

- 712. Amblygobius bynoensis (Richardson). Luzon (Peters, C); Negros, (Jordan & Seale, B).
- 713. Amblygobius phalæna (Cuvier & Valenciennes). Cagayancillo (Jordan & Richardson).
- 714. Amblygobius sphinx (Cuvier & Valenciennes). Negros (Jordan & Seale, B).

#### EXYRIAS Jordan & Seale.

715. Exyrias puntang (Bleeker). Palawan (Vaillant).

We do not know whether this is the Gobius puntang of Bleeker, Natuurk. Tydschr, Nederl Ind. III, page 692, or the G. puntang of Bleeker, Riouw, page 486, said to be different species by Dr. Günther. Gobius puntang of Bleeker is said by Dr. Günther to equal G. puntangoides Bleeker, Ceram. III, page 242 (=Exyrias puntangoides of Jordan & Seale, Samoa, p. 405).

<sup>&</sup>lt;sup>1</sup>Dorsal VI-I, 10; anal I, 10; Scales 52-55; eyes one eye apart; maxillary to middle of eye; no canines; outer row of teeth enlarged; head naked behind eyes except for a few scales on upper part of opercle and preopercle; scales on nape smaller; pectoral without silk-like rays. (Peters.)

- WAITEA Jordan & Seale. (Waitea Jordan & Seale, Bull. U. S. Bur. Fish., XXV, 1905, 407 (mystacina).)
- 716. Waitea mystacina (Cuvier & Valenciennes). Aparri (Jordan & Richardson).
  - APARRIUS Jordan & Richardson. (Aparrius Jordan & Richardson, Bull. U. S. Bur. Fish., XXVI, 1908, p. 278, (acutipinnis).)
- 717. Aparrius acutipinnis (Cuvier & Valenciennes). Mindanao (Smith & Seale); Cavite (Jordan & Seale, A, Rhinogobius ocyurus); Aparri (Jordan & Richardson).
  - Rhinogobius ocyurus Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 42, fig. 14, Cavite, P. I.
  - Acentrogobius acutipinnis Smith & Seale, Proc. Bio, Soc. Wash., XIX, 1906, fig. 81; Mindanao, P. I.
  - Aparrius acutipinnis Jordan & Richardson, Bull. U. S. Bur. Fish, XXVI, 1908, p. 278; Aparri, P. I.
  - Gobius (Acentrogobius) acutipinnis Day, Fishes, India, 1878–1888, 292, pl. LXI. fig. 2; seas of India to Andamans.
  - GOBIICHTHYS Klunzinger. (Pselaphias Jordan & Seale.) Gobiichthys Klunzinger, Fische des Rothen Meeres, 1871, 479 (petersii).
    - Except in the presence of a tentacle over the eye this genus does not differ from Oxyurichthus Bleeker.
- 718. Gobiichthys tentacularis (Cuvier & Valenciennes). Cavite (Jordan & Seale, A, Oxyurichthys tentacularis); Iloilo; Aparri (Jordan & Richardson).

## **OXYURICHTHUS** Bleeker.

- The genus Oxyurichthus (belosso) differs from Gobiichthys Klunzinger (Psclaphias, Jordan & Seale) in lacking a tentacle over the eye and from Gobiichthys Girard, in having the upper teeth in a single series and the tongue convex.
- 719. Oxyurichthus cristatus (Day). Iloilo (Jordan & Seale, A); San Fabian (Evermann & Seale, A); Cagayancillo (Jordan & Richardson).
- 720. Oxyurichthus papuensis (Cuvier & Valenciennes). Negros (Jordan & Seale, B).
- 721. Oxyurichthus argulus¹ (Peters). Luzon (Peters, C).
  Gobius argulus Peters, Monatsber, Akad. Wiss, Berl., 1868, 263; Luzon,
  P. I.
- 721a. Oxyurichthus (?) filifer Cuvier & Valenciennes. Palawan (Vaillant).

#### GOBIOSOMA Girard.

722. Gobiosoma marmoratum (Peters). Samar (Peters, C).

Gobiosoma marmoratum Peters, Monatsber. Akad. Wiss. Berl., 1868, 267;Samar, P. I. The generic relations of this scantily described species are uncertain. It is doubtless not a Gobiosoma.

<sup>&</sup>lt;sup>1</sup> Dorsal VI-I, 12; anal 7; scales very small; canines in upper and lower jaws; caudal pointed; near Gobius arabicus. (Peters.)

#### SICYOPTERUS Gill.

- 723. Sicyopterus tæniurus (Günther). Mindoro (Jordan & Richardson).
- 724. Sicyopterus cynocephalus (Cuvier & Valenciennes). Palawan (Boulenger, A).

## TRYPAUCHENICHTHYS Bleeker.

- 725. Trypauchenichthys typus (Bleeker). Cagayancillo (Jordan & Richardson).
- CARAGOBIUS Smith & Seale. (Caragobius Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906, 81. (typhlops).)
- 726. Caragobius typhlops Smith & Seale. Mindanao (Smith & Seale.)
  Caragobius typhlops Smith & Seale, Proc. Biol. Soc. Wash., XIX, 1906,
  81, fig.; Rio Grande, Mindanao, P. I.

#### GOBIOIDES Lacépède.

727. Gobioides brachygaster (Günther). Aparri (Jordan & Richardson).

## Gobiidæ: Species incertæ sedis:

- 728. (Gobius) dispar Peters, Monatsber, Akad. Wiss. Berl., 1868, 263; Luzon.

  Dorsal VI-I, 7; anal 1, 7; scales 23-30; in form like an Apogon: eyes an eye apart; mouth large, maxillary to back of preopercle in males; no canines; outer row of teeth enlarged. Habitat, lakes and rivers of Luzon. (Peters.) Perhaps a Glossogobius.
- 729. (Gobius) viganensis, Steindachner, S. B. Ak, Wien, CH, 1893, 230; *Philippine Islands*. Description not seen by us.

## Family ECHENEIDÆ.

## ECHENEIS Linnæus.

730. Echeneis naucrates (Linnæus). Manila (Jordan & Seale, A); Bulan (Evermann & Seale, A).

## Family SCORPAENIDÆ.

## MERINTHE 1 Snyder.

731. Merinthe nematophthalma (Günther). Philippine Islands, Sta. 201 (Günther, A).

#### LIOSCORPIUS Günther.

732. Lioscorpius longiceps Günther. Philippine Islands (Günther, A).
Lioscorpius longiceps Günther, Shore Fishes Challenger, p. 40, pt. XVII, fig.
C.; Ki. Islands.

# SEBASTOPSIS Gill.

- 733. Sebastopsis marmorata (Cuvier & Valenciennes). Manila (Kner).
- 734. Sebastopsis guamensis (Quoy & Gaimard). Calayan (Jordan & Richardson).
  - (=Sebastes polylepis Bleeker.)
- 735. Sebastopsis scabra (Ramsay & Ogilby). Cavite (Jordan & Seale, A);
  Negros (Jordan & Seale, B); Bacon (Evermann & Seale, A).

<sup>&</sup>lt;sup>1</sup>Listed as Merinthe Jordan & Evermann in Samoan Report. The name was a MS. name of Jordan & Evermann, adopted by Snyder.

#### HYPOMACRUS Evermann & Seale.

736. Hypomacrus albaiensis Evermann & Seale. Bacon (Evermann & Seale, A).
Hypomacrus albaiensis Evermann & Seale, Bull. U. S. Fish Comm., XXVI,
1906, p. 102, fig. 20. Bacon, Philippine Islands.

#### SCORPÆNOPSIS Bleeker.

- 737. Scorpænopsis novæ-guineæ (Cuvier & Valenciennes). Cavite (Jordan & Seale, A); Negros (Jordan & Seale, B).
- 738. Scorpænopsis cirrhosa (Thunberg). Panay (Jordan & Seale, A).

#### SEBASTAPISTES Gill.

- 739. Sebastapistes tristis (Klunzinger). Panay (Jordan & Seale, A); Bacon (Evermann & Seale, A).
- 740. Sebastapistes nuchalis (Günther). Calayan (Jordan & Richardson). Scorpæna nuchalis Günther, Sudsee, I, 76; Rarotonga.
- 741 (742). Sebastapistes nivifer Jordan & Seale. Negros (Jordan & Seale, B). Sebastapistes nivifer Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 791, fig. 10; Negros, P. I.

## SYNANCEIA Bloch & Schneider.

743. Synanceia horrida (Linnæus). Zamboanga (Seale & Bean).

#### PTEROIS Cuvier.

- 744. Pterois zebra (Cuvier & Valenciennes). Bacon (Evermann & Seale, A).
- 745. Pterois volitans (Linnæus). Bacon (Evermann & Seale, A).

## **DECTERIAS** Jordan & Starks.

746. Decterias pusillus (Temminck & Schlegel). Panay (Jordan & Seale, A).

## PARACENTROPOGON Bleeker.

- 747. Paracentropogon longispinis (Cuvier & Valenciennes). Philippine Islands, Sta. 203 (Günther, A); Cuyo (Jordan & Richardson).
- 748. Paracentropogon indicus (Day). Cuyo (Jordan & Richardson).

## AMBLYAPISTUS Bleeker.

- 749. Amblyapistus crista-galli (Günther). Philippine Islands (Günther). [Said by Bleeker (Mem. Spec. Insul. Scorpæn.) to be a synonym of A. twnionotus (C. V.)]
- VESPICULA Jordan & Richardson, new genus, type Prosopodasys gogorzæ (Jordan & Seale). (Prosopopasys of Günther, not of Cantor, who gives the name Prosopodasys, as a substitute for Apistus, changed on account of the prior Apistis.)
- 750. Vespicula gogorzæ (Jordan & Seale). Negros (Jordan & Seale, B).
  Prosopodasys gogorzæ Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1906, 792, fig. 11; Negros, P. I.

#### TETRAROGE Günther.

751. Tetraroge barbata (Cuvier & Valenciennes). Aparri (Jordan & Richardson).

## Family PLATYCEPHALIDÆ.

#### PLATYCEPHALUS Bloch.

752. Platycephalus indicus (Linnæus). Cavite (Jordan & Seale, A, P. insidiator); Negros (Jordan & Seale, B, P. insidiator); Manila (Jordan & Richardson); San Fabian (Evermann & Seale, A, P. insidiator); Manila (Evermann & Seale, B, P. insidiator); (equals Cottus insidiator Forskâl).

THYSANOPHRYS Ogilby. (Insidiator Jordan & Snyder.)

- 753. Thysanophrys isacanthus (Cuvier & Valenciennes). Cavite (Jordan & Seale, A).
- 754. Thysanophrys crocodilus (Tilesius). Cavite (Jordan & Seale, A, Platycephalus punctatus).
- 755. Thysanophrys bataviensis (Bleeker). Jolo (Evermann & Seale, A).
- 756. Thysanophrys macracanthus (Bleeker). Manila (Jordan & Seale, A);
  San Fabian (Evermann & Seale, A).
- 757. Thysanophrys tentaculatus (Rüppell). Cuyo (Jordan & Richardson).

#### ELATES Jordan & Seale.

758. Elates thompsoni Jordan & Seale. Manila (Jordan & Seale, A).
Elates thompsoni Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 39, fig. 12; Manila, P. I.

# Family COTTIDÆ.

TRACHYDERMUS Heckel. (Centridermichthys Richardson).

759. Trachydermus fasciatus¹ Heckel. Philippine Islands (Heckel, B); Manila (Günther, C). (=T. ansatus Richardson from China.)
Trachidermus fasciatus Heckel, Ann. Wiener, Mus., II, 1840, 160, pl. IX, fig. 1, 2; Philippines.

Family TRIGLIDÆ.

## LEPIDOTRIGLA Günther.

760. Lepidotrigla eydouxi Sauvage. Manila (Sauvage). Lepidotrigla eydouxi Sauvage, Nouv. Arch. Mus., 1878, 156; Manila, P. I.

## Family DACTYLOPTERIDÆ.

## EBISINUS Jordan & Richardson.

761. Ebisinus cheirophthalmus (Bleeker). Manila; Cavite (Jordan & Seale, A).

## Family PLEURONECTIDÆ.

## PSETTODES Bennett.

762. Psettodes erumei (Bloch). Cavite (Jordan & Seale, A); San Fabian (Evermann & Seale, A).

<sup>&</sup>lt;sup>1</sup> It is extremely improbable that this species, native in the mountain springs of Kiusiu, Japan, and in China, is found in the Philippines.

## PSEUDORHOMBUS Bleeker. (Ancylopsetta Gill).

- 763. Pseudorhombus javanicus (Bleeker). Cavite (Jordan & Seale, A, P. polyspilos, not of Bleeker); Bulan (Evermann & Seale, A).
- 764. Pseudorhombus arsius (Hamilton-Buchanan). Cavite (Jordan & Seale, A); Philippines (Günther, A, P. russelli); Bulan (Evermann & Seale, A, P. russellii), (=Platessa russelli Gray).
- 765. Pseudorhombus polyspilus (Bleeker). Cavite (Jordan & Seale, A); Iloilo; Manila (Jordan & Richardson).
- 766. Pseudorhombus neglectus (Bleeker). San Fabian (Evermann & Seale, A).
- 767. Pseudorhombus malayanus Bleeker. Manila (Jordan & Richardson).
- 768. Pseudorhombus palad Evermann & Seale. Bulan (Evermann & Seale, A).
  Pseudorhombus palad Evermann & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 105, fig. 21, Bulan, P. I.

#### PLATOPHRYS Swainson.

- 769. Platophrys pantherinus (Rüppell). Aparri (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 770. Platophrys mancus (Broussonet). Malanipa, near Zamboanga (Günther. A, Rhomboidichthys pavo).

## SCÆOPS Jordan & Starks.

- 771. Scæops pœcilura (Bleeker). Negros (Jordan & Seale, B).
- 772. Scæops orbicularis (Bleeker). Cavite (Jordan & Seale, A).
- 773. Scæops spilura (Günther). Straits of Cebu (Günther, A).
  Rhomboidichthys spilurus Günther, Shore Fishes Challenger, p. 53, pl. XXI, fig. A.; Straits of Cebu, P. I.

## Family SOLEIDÆ.

#### AMATE Jordan & Starks.

- 774. Amate hartzfeldi (Bleeker). Philippines (Evermann & Seale, A).
- 775. Amate thepassii (Bleeker). Mindanao (Smith & Seale).

#### PARDACHIRUS Günther.

776. Pardachirus pavoninus (Lacépède). Bacon (Evermann & Seale, A).

## **SOLEICHTHYS** <sup>1</sup> Bleeker.

777. Soleichthys heterorhinos (Bleeker). Bacon (Evermann & Seale, A).

#### MICROBUGLOSSUS Günther.

- 778. Microbuglosus humilis (Cantor). Cavite (Jordan & Seale, A); Manila (Jordan & Richardson).
- 779. Microbuglossus ovatus (Richardson). Philippines, Sta. 203 (Günther, A).

<sup>&</sup>lt;sup>1</sup> Blkr., Enum. Spec. p. 183; for figure of the type (heterorhinos) see Day, Fish. India, pl. XCII, fig. 5.

#### SYNAPTURA 1 Cantor.

780 (781). Synaptura sorcogonensis Evermann & Seale. Bacon (Evermann & Seale, A); Manila; Lubang (Jordan & Richardson).

Synaptura sorsogonensis Evermann & Seale, Proc. U. S. Fish Comm., XXVI, 1906, 106, fig. 22; Bacon, P. I.

## CYNOGLOSSUS Hamilton-Buchanan.

- 782. Cynoglossus sumatrensis (Bleeker). Ticao (Jordan & Richardson).
- 783. Cynoglossus sindensis Day. Manila (Jordan & Richardson).
- 784. Cynoglossus puncticeps (Richardson). Philippines, Sta. 203 (Günther, A)
  Manila (Jordan & Seale, A).
- 785. Cynoglossus macrolepidotus (Bleeker). Manila (Kner).

# Family PTEROPSARIDÆ.

## PARAPERCIS Bleeker.

- 786. Parapercis hexophthalma (Ehrenberg). Philippines (Jordan & Seale, A);
  Bacon (Evermann & Seale, A).
- 787. Parapercis tetracantha (Lacépède). Calayan (Jordan & Richardson).
- 788. Parapercis cylindrica (Bloch). Philippine Islands (Günther) Cuyo (Jordan & Richardson); Zamboanga (Seale & Bean).

## Family BATRACHOIDIDÆ.

## CORYZICHTHYS Ogilby.

789. Coryzichthys diemensis (Le Sueur). Cuyo (Jordan & Richardson).

## Family CALLIONYMIDÆ.

## CALLIONYMUS Linnaus.

- 790. Callionymus sagitta Pallas. Manila (Jordan & Richardson).
- 791. Callionymus curvicornis Cuvier & Valenciennes. Philippine Islands, Sta. 201 (Günther, A).
- 792. Callionymus calauropomus Richardson. Philippines, Sta. 204 (Günther, A).

#### CALLIURICHTHYS Jordan & Fowler.

793. Calliurichthys reevesii (Richardson). Bulan (Evermann & Seale, A).

## SYNCHIROPUS Gill.

794. Synchiropus ocellatus (Pallas). Calayan (Jordan & Richardson).

#### DACTYLOPUS Gill.

795. Dactylopus dactylopus (Bennett). Cavite, (Jordan & Seale, A).

<sup>&</sup>lt;sup>1</sup>The name *Brachirus* of Seranison belongs to the closely allied genus *Eury-glossa*, as restricted by Swain.

# Family RHYACICHTHYIDÆ.

RHYACICHTHYS Boulenger. (Platyptera Kuhl & Van Hasselt, preoccupied).

796. Rhyacichthys aspro (Kuhl & Van Hasselt). Samar; Leyte (Peters, C).

# Family BLENNIIDÆ.

# ENNEAPTERYGIUS Rüppell.

797. Enneapterygius philippinus (Peters). Luzon (Peters, C); Calayan (Jordan & Richardson).

Tripterygium philippinum Peters, Monatsber, Ak. Wiss. Berl., 1868, 269; Luzon, P. I.

## CRISTICEPS Cuvier & Valenciennes.

798. Cristiceps filifer Steindachner. Philippine Islands (Steindachner, A).
Cristiceps filifer Steindachner, Archiv. per la Zoologia, vol. III, fasc 1, 1867, 199-200; Philippine Islands.

#### BLENNIUS Linnæus.

799. Blennius thysanius Jordan & Seale. Cavite, (Jordan & Seale, A).
Blennius thysanius Jordan & Seale, Bull. U. S. Bur. Fish., XXVI, 1906, 47, fig. 19; Cavite, P. I.

## HYPLEUROCHILUS Gill.

800. Hypleurochilus loxias Jordan & Seale. Negros (Jordan & Seale, B).
Hypleurochilus loxias Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 802, fig. 20; Negros, P. I.

# ALTICUS (Commerson) Lacépède.

801. Alticus periophthalmus (Cuvier & Valenciennes). Samar (Peters, C).

#### SALARIAS Cuvier.

- 802. Salarias edentulus (Bloch & Schneider). Negros (Jordan & Seale, B); Calayan (Jordan & Richardson).
- 803. Salarias rivulatus Rüppell. Calayan (Jordan & Richardson).
- 804. Salarias fasciatus (Bloch). Philippine Islands (Günther); Luzon (Peters, C); Negros (Jordan & Seale, B); Cagayancillo (Jordan & Richardson); Bacon (Evermann & Seale, A).
- 805. Salarias bilineatus Peters. Samar (Peters, C).
  Salarias bilineatus Peters, Monatsber. Ak. Wiss. Berl., 1868, 269; Samar,
  P. I.
- 806. Salarias deani Jordan & Seale. Negros (Jordan & Seale, B); Calayan (Jordan & Richardson, determination questionable).
  Salarias deani Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 799, fig. 17; Negros, P. I.
- 807. Salarias undecimalis Jordan & Seale. Negros (Jordan & Seale, B).

  Salarias undecimalis Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905,

  800. fig. 18, Negros, P. I.
- 808. Salarias zamboangæ Evermann & Seale. Mindanao (Evermann & Seale, B).
  - Salaries zamboangæ Evermann & Seale, Proc. U. S. Nat. Mus., XXXI, 512, fig. 4; Mindanao, P. I.

- 809. Salarias holomelas Günther. Cebu (Günther, C).

  Salarias holomelas Günther, Ann. Mag. N. H., 1872, 399; Cebu, P. I.
- 810. Salarias reyi Sauvage. Luzon (Sauvage, B).

  Salarias reyi Sauvage, Bull. Soc. Philom. (7) IV, 1880, 219; Luzon, P. I.

  [No canines.]
- 811. Salarias montanoi Sauvage. Luzon (Sauvage, B).
  Salarias montanoi Sauvage, Bull. Soc. Philom. (7) IV, 1880, 219; Luzon,
  P. I. [No canines.]

## PETROSCIRTES Rüppell.

- 812. Petroscirtes grammistes Cuvier & Valenciennes. Bacon (Evermann & Seale, A).
- 813. Petroscirtes eretes Jordan & Seale. Panay (Jordan & Seale, A); Manila (Jordan & Seale A, P. vulsus); Negros (Jordan & Seale, B); Cuyo (Jordan & Richardson).
  - Petroscirtes eretes Jordan & Seale, Proc. U. S. Nat. Mus., XXVIII, 1905, 801, fig. 19; Negros, P. I.
  - Petroscirtes vulsus Jordan & Seale, Bull. U. S. Fish Comm., XXVI, 1906, 48, fig. 20; Manila, P. I.

# Family CONGROGADIDÆ.

# CONGROGADUS Günther. (Machærium Richardson, Hierichthys Jordan & Fowler.)

- 814. Congrogadus subducens (Richardson). Cuyo (Jordan & Richardson).
- 815. Congrogadus hierichthys Jordan & Richardson. Cuyo (Jordan & Richardson).
  - Congrogadus hierichthys Jordan & Richardson, Bull. U. S. Bur. Fish., XXVII. 1908, 285; Cuyo, P. 1.

## Family FIERASFERIDÆ.

# FIERASFER Cuvier.

816. Fierasfer homei Richardson. Cavite (Jordan & Seale A).

## ENCHELIOPHIS Müller.

817. Encheliophis vermicularis (Müller). Philippine Islands (Müller, Günther). This fish is stated by Dr. Boulenger (Cambridge Nat. Hist., Vol. VII, 625) to be a larval Fierasfer.

## Family BROTULIDÆ.

# DINEMATICHTHYS Bleeker.

818. Dinematichthys iluocœteoides Bleeker. Ticao (Jordan & Richardson).

## BROTULOPHIS Kaup.

819. Brotulophis argentistriatus Kaup. Sulu? (Kaup; Günther, after Kaup).

# NEOBYTHITES Goode & Bean.

820. Neobythites macrops Günther. Sta. 210 off Philippines (Günther, B).
Neobythites macrops Günther, Deep Sea Fishes Challenger, p. 102, pl. XX, fig. A; Sta. 210 off Philippines.

#### BATHYONUS Günther.

821. Bathyonus compressus Günther. Sta. 205, Philippine Islands (Günther, B).

Bathyonus compressus Günther, Ann. Mag. N. H., II, 1878, 20.

#### ACANTHONUS Günther.

822. Acanthonus armatus Günther. Sta. 205, Philippine Islands (Günther, B).

Acanthonus armatus Günther, Ann. Mag. N. H., 11 1878, 22.

## Family BREGMACEROTIDÆ.

## BREGMACEROS Thompson.

823. Bregmaceros macclellandii Thompson. Philippine Islands (Günther).

Family MACROURIDÆ.

## TRACHONURUS Günther.

824. Trachonurus villosus (Günther). Sta. 214, South of Philippines (Günther, B).

Macrurus villosus Günther, Ann. Mag. N. H., XX, 1877, 441.

## BATHYGADUS Günther.

825. Bathygadus multifilis Günther. Sta. 214, South of Philippines (Günther, B).

Bathygadus multifilis Günther, Deep Sea Fishes Challenger, p. 155, pl. XLII, fig. B.; Sta. 214, South of Philippines.

## Family LOPHIIDÆ.

## CHIROLOPHIUS Regan.

826. Chirolophius naresi (Günther). Sta. 204, Philippine Islands (Günther. A); Philippines (Regan).

Lophius naresi Günther, Shore Fishes Challenger, p. 56, pl. XXV; Sta. 204, Philippine Islands.

## Family ANTENNARIIDÆ.

## ANTENNARIUS (Commerson) Lacépède.

- 827. Antennarius hispidus (Bloch). Manila; Cavite; Panay (Jordan & Seale, A).
- 828. Antennarius chironectes (Lacépède). Cagayancillo (Jordan & Richardson).
- 829. Antennarius lithinostomus Jordan & Richardson. Cuyo (Jordan & Richardson).

Antennarius lithinostomus Jordan & Richardson, Bull. U. S. Bur. Fish, XXVII, 1908, 286; Cuyo, P. I.

## PTEROPHRYNE Gill.

830. Pterophyne histrio (Linnæus). Manila (Jordan & Seale, A).

# SPECIES ATTRIBUTED TO PHILIPPINE ISLANDS.

[These names are given on the authority of Palacky, Elera, or Gogorza; see below.]

#### CARCHARIIDÆ.

Hypoprionodon hemiodon (Müller & Henle).

#### PRISTDÆ.

Pristis perotteti (Müller & Henle).

#### CLUPEIDÆ.

Sardinella fimbriata (Cuvier & Valencieunes). Sardinella zunasi (Bleeker).

## ENGRAULIDÆ.

Anchovia tri (Bleeker).
Anchovia rhinorhyncha (Bleeker).

ANGUILLIDÆ.

Anguilla amboinensis Peters.

#### LEPTOCEPHALIDÆ.

Leptocephalus conger (Linnæus).

#### OPHICHTHYIDÆ.

Ophichthus apicalis (Bennett).

Pisoodonophis boro (Hamilton-Buchanan).

Chlevastes colubrinus (Bleeker).

Cirrhimuræna chinensis (Hamilton-Buchanan).

#### MURÆNIDÆ.

Uropterygius marmoratus (Lacépède).

#### SILURIDÆ.

Pseudarius falcarius (Richardson). Pseudarius pidada (Bleeker). Ariodes tonggol (Bleeker).

## CLARIIDÆ.

Clarias melanodermus Bleeker. Clarias macrocephalus Günther.

## BELONIDÆ.

Tylosurus melanotus (Bleeker). Tylosurus schismatorhynchus (Bleeker).

<sup>&</sup>lt;sup>1</sup> In this list generic names have, when necessary, been changed to make them conform with the nomenclature of the preceding check-list.

## EXOCŒTIDÆ.

Hemiramphus commersoni Cuvier & Valenciennes. Hemiramphus georgii (Bleeker). Cypselurus oligolepis (Bleeker).

#### MUGILIDÆ.

Mugil subviridis Cuvier & Valenciennes. Liza melinoptera (Cuvier & Valenciennes).

#### SPHYRÆNIDÆ.

Sphyræna commersonii Cuvier & Valenciennes.

#### SYNGNATHIDÆ.

Corythroichthys cyanospilus (Bleeker). Corythroichthys conspicillatus (Jenyns).

## CARANGIDÆ.

Scomberoides sanctipetri (Cuvier & Valenciennes). Decapterus muroadsi (Temminck & Schlegel).

#### TRICHIURIDÆ.

Trichiurus savala Bleeker.

## EQUULIDÆ.

Leiognathus nuchalis (Temminck & Schlegel).

## APOGONICHTHYIDÆ.

Amia orbicularis (Kuhl & Van Hasselt). Chéilodipterus quinquelineatus (Cuvier & Valenciennes).

#### AMBASSIDÆ.

Ambassis batjanensis Bleeker.

#### SERRANIDÆ.

Epinephelus celebicus (Bleeker).

## LUTIANDÆ.

Nemipterus nematophorus (Bleeker). Cæsio maculatus Cuvier & Valenciennes.

#### THERAPONIDÆ.

Therapon argenteus (Cuvier & Valenciennes).
Therapon ellipticus¹ (Richardson).
Scolopsis bleekeri Günther.
Pentapus nemurus (Bleeker).
Plectorhynchus chætodonoides (Lacépède).

#### SPARIDÆ.

Lethrinus ramak (Forskål).

Monotaxis heterodon (Bleeker).

# MULLIDÆ.

Upeneus pleurospilos (Bleeker).
Upeneoides moluccensis (Bleeker).

<sup>&</sup>lt;sup>1</sup>Originally described from rivers of West Australia. Richardson, Erebus and Terror, p. 118.

## SCIÆNIDÆ.

Pseudosciæna sina (Belanger).

#### POMACENTRIDÆ.

Pomacentrus chrysopæcilus Kuhl & Van Hasselt.

#### LABRIDÆ.

Chœrodon macrodonta (Lacépède).
Chœrodon leucozonus (Bleeker).
Anampses godeffroyi Günther.
Halichœres schwartzii (Bleeker).

## SCARICHTHYIDÆ.

Callyodon chrysopomus (Bleeker).

#### SIGANIDÆ.

Siganus luridus (Rüppell).

#### TRIACANTHIDÆ.

Triacanthus strigilifer Cantor.

#### TETRAODONTIDÆ.

Sphaeroides oblongus (Bloch). Tetraodon mappa Lesson. Canthigaster papua (Bleeker).

## BALISTIDÆ.

Balistes bursa Bloch & Schneider.

#### OSTRACIIDÆ.

Ostracion diaphanum Bloch & Schneider.

#### GOBIIDÆ.

Belobranchus belobranchus (Cuvier & Valenciennes).
Oxyeleotri marmorata (Bleeker).
Odontobutis obscura (Temminck & Schlegel).
Exyrias puntangoides (Bleeker).
Oplopomus oplopomus (Cuvier & Valenciennes).
(? Drombus) baliurus (Cuvier & Valenciennes).
Rhinogobius cyanoclavis (Cantor).
Rhinogobius chlorostigmatoides (Bleeker).
(? Glossogobius) spectabilis (Günther).
Parapocryptes nexipinnis (Cantor).
Pseudapocryptes borneensis (Bleeker).
Apocryptodon madurensis (Bleeker).

#### SCARPAENIDÆ.

Merinthe bandanensis (Bleeker).
Scarpænopsis diabolus (Cuvier & Valenciennes).
Sebastapistes strongius (Cuvier & Valenciennes).
Centropogon robustus Günther.
Centropogon fuscovirens (Quoy & Gaimard).
Amblyapistus tænionotus (Cuvier & Valenciennes).

## SOLEIDÆ.

Cynoglossus quadrilineatus (Bleeker). Cynoglossus brachyrhynchus (Bleeker).

# TRICHONOTIDÆ.

Trichonotus setigerus (Bloch & Schneider).

# LOPHIIDÆ.

Lophiomus setigerus (Vahl).

# LIST OF PAPERS CONTAINING ORIGINAL RECORDS OR DESCRIPTIONS OF PHILIPPINE FISHES.

bleeker, Pieter. Atlas ichthyologique des Indes Orientales néerlandaises, t. I-IX,
pp. 1246, pl. 1-ccccxx. Amsterdam, 1862-1877.
Philippine species recorded or described:
Anguillidæ 1
Labridæ 1
Localities represented:
Philippine Islands.
Manila.
Boulenger, George Albert (A). List of the Freshwater Fishes collected by Mr. A.
Everett on Palawan and Balabac. Annals and Magazine of Natural
History, ser. 6, XV, 1895, pp. 185–187.
Species recorded or described:
Murænidæ 1
Cyprinidæ 3
$\mathbf{Syngnathide}$ 1
Ophicephalidæ 1
Gobiidæ 7
Localities represented:
Palawan.
Balabac.
Boulenger, George Albert (B). Catalogue of the Fishes of the British Museum.  Second edition. Vol. I. London, 1895.
Philippine species recorded or described:
Serranidæ 9
Localities represented:
Philippine Islands.
Cebu.
Cartier, Oscar. Ein Beitrag zur Kenntniss der Fische des philippinischen Ar-
chipels. Verhandlungen der physikalisch-medicinischen Gesellschaft in Würzburg, 1873, pp. 96–106. Würzburg, 1873.
Species recorded or described:
Pomacentridæ 9
Labridæ 9
Scarichthyidæ 2
Localities represented:
Cavite, Luzon,
Bohol,
Cebu.
Panglao.

Cuvier, Georges et Valenciennes, Achille. Histoire naturelle des poissons, t. 1-22, pp. 8337, pl. I-VIII+9-650. Paris, 1828-1846.

Philippine species recorded or described:

Siluridæ	3
Exocetide	1
Carangidæ	1
Equulidæ	1
Hæmulidæ	1
Ophicephalidæ	1
Anabantidæ	1
Chætodontidæ	1

Locality represented:

Manila.

Note.—A majority of the above species are recorded on faith of notes or drawings of Commerson, Dussumier, or Mertens, or of "members of the Russian Expedition."

Elera, Castro de. Catálogo sistemático de toda la fauna de Filipinas. I, Vertebrados, pp. 1-701 (Pisces, pp. 454-621). Manila, 1895.

A check-list of many species, based (chiefly) on specimens preserved in the Museo de Santo Tomás de Manila; the identifications not always trustworthy.

Evermann, Barton Warren, and Seale, Alvin (A). Fishes of the Philippine Islands. Bulletin, U. S. Bureau of Fisheries, XXVI, 1906, pp. 49-110, figs. 1-22. Washington, 1907.

Species recorded or described, 296, representing 89 families and 139 genera.

Localities represented:

Luzon---

San Fabian, Province of Pangasinan.

Bacon, Province of Sorsogon.

Bulan, Province of Sorsogon.

Tarlac.

Mindanao, Zamboanga.

Sulu Archipelago, Jolo.

Evermann, Barton Warren, and Seale, Alvin (B). Fishes collected in the Philippine Islands by Maj. Edgar A. Mearns, surgeon, U. S. Army. Proceedings U. S. National Museum, XXXI, 1906, pp. 505-512, figs. 1-4. Washington, 1906.

Species recorded or described:

Chanidæ	1
Mugilidæ	2
Exocœtidæ	1
Ophicephalidæ	1
Lutianidæ	1
Hæmulidæ	2
Sparidæ	2
Acanthuridæ	1
Platycephalidæ	1
Tetraodontidæ	2
Gobiidæ	2
Blenniidæ	1

Localities represented:

Luzon, Manila.

Mindanao, Caldera Bay at Zamboanga.

Siassi.

Sulu Archipelago, Jolo.

Gogorza y Gonzalez, José. Peces de las Islas Filipinas. Atlas de la Sociedad Española de Historia Natural, XIV, pp. 72-74. Madrid, 1885.

A check-list of many species, evidently largely a compilation; the identifications not always trustworthy.

Gogorza y Gonzalez, José. Datos para la Fauna Filipina. Anales de la Sociedad Española de Historia Natural, XVII, pp. 247-303 (pisces, pp. 281-303). Madrid, 1887.

A check-list of many species. Introduction contains a historical sketch of collecting done up to year 1887.

Günther, Albert. Catalogue of the fishes in the collections of the British Museum, Vol. I-VIII. London, 1859-1870.

Philippine species recorded or described (with the exception of about a half dozen species, on authority of Heckel, Kaup, or Müller & Troschel; the following records based on specimens in the British Museum):

Dorosomatidæ	1
Symbranchidæ	1
Anguillidæ	1
Murænesocidæ	1
Ophichthyiidæ	2
Clariidæ	1
Plotosidæ	1
Mugilidæ	1
Centriscidæ	1
Syngnathidæ	1
Holocentridæ	1
Carangidæ	1
Equulidæ	1
Apogonichthyidæ	1
Ambassidæ	1
Serranidæ	5
Lutianidæ	1
Hæmulidæ	3
Sparidæ	2
Gerridæ	2
Mullidæ	3
Sillaginidæ	1
Pseudochromidæ	1
Ophicephalidæ	1
Anabantidæ	1
Pomacentridæ	4
Labridæ	2
Drepanidæ	1
Platacidæ	1

<sup>&</sup>lt;sup>1</sup> Zool. Record, 1885, Pisc. p. 15.

 $<sup>^2\,\</sup>mathrm{These}$  species are credited to their original recorders in the present check-list. (J. & R.)

<sup>77344----5</sup> 

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Chætodontidæ
                     1
Acanthuridæ
                     2
Siganidæ
                     2
Triacanthidæ
                     1
Tetraodontidæ
Balistidæ
Diodontidæ
                     1
Gobiidæ
Scorpænidæ
                     1
Pteropsaridæ
Blenniidæ
Fierasferidæ
Brotulidæ
Bregmacerotidæ
                     1
```

### Localities represented:

Philippine Islands.

Soolo (after Kaup; = Sulu).

Günther, Albert (A). Report on the Shore Fishes procured during the voyage of H. M. S. "Challenger" in the years 1873-1876. Voyage of H. M. S. "Challenger," Zoölogy, I, pt. VI, 82 pp., 32 pl. London, 1880.

Philippine species recorded and described:

II I	
Hemiscylliidæ	1
Murænidæ	3
Cyprinidæ	2
Equulidæ	2
Centriscidæ	1
Acropomidæ	1
Serranidæ	1
Hæmulidæ	2
Ophicephalidæ	1
Champsodontidae	1
Ophicephalidæ	1
Labridæ	1
Monacanthidæ	2
Tetraodontidæ	2
Balistidæ	<b>2</b>
Di <b>o</b> dontidæ	. 1
Scorpænidæ	3
Platycephalidæ	1
Pleuronectidæ	3
Soleidæ	2
Callionymidæ	2
Lophiidæ	1
<del>T</del>	

#### Localities represented:

Luzon, Manila.

Reefs near Zebu (Cebu).

Samboangan (=Zamboanga, Mindanao).

Pasananca, near Samboangan.

Malanipa, near Samboangan.

Stations 201, 203, and 204.

Günther, Albert (B). Voyage of H. M. S. "Challenger," Zoölogy, XXII, pp. I-Lxv + 335, 73 pl. London, 1887.

Philippine species recorded or described:

Alepocephalidæ 1 Malacosteidæ 1 Myctophidæ 2 Sternoptychidæ 2 Evermannellidæ 1 Halosauridæ 1 Brotulidæ 3 Macrouridæ 2

Localities represented:

Station 198, north of Celebes.

Station 200, between Philippine Islands and Borneo.

Station 205, off Philippines.

Station 207, west of Philippines.

Station 210, off Philippines.

Station 214, south of Philippines.

Günther, Albert (C). Report on the Deep Sea Fishes collected by H. M. S. "Challenger" during the years 1873-76. Annals and Magazine of Natural History, 1872, pp. 397-399. London, 1872.

Philippine species recorded or described:

 Atherinidæ
 1

 Sciænidæ
 1

 Gobiidæ
 1

 Cottidæ
 1

 Blenniidæ
 1

Localities represented:

Luzon, Manila.

Cebu.

Günther, Albert (D). Fische der Südsee. Bd. I, pp. 1-128, taf. 1-83. Journal des Museums Godeffroy, Bd. II, Hft. III. Hamburg, 1873.

Philippine species recorded or described:

Sparidæ, 1.

Locality represented:

Philippine Islands.

Heckel, Jacob. (A). Russegger's Reisen, I, 1025, 1840.

Philippine species recorded or described:

Cottidæ, 2.

Locality represented:

Philippine Islands.

Heckel, Jacob. (B). Ann. Wiener Mus. II, 160, 1840 (Günther, Cat. II, 169) or 1837 (Agassiz, Nomenclator Zoolog., Trachidermus; Pisc.).

Philippine species recorded or described:

Cottidæ, 1.

Locality represented:

Philippine Islands.

Jordan, David Starr, and Richardson, Robert Earl. List of Fishes Collected in the Philippines by Richard Crittenden McGregor. Bulletin U. S. Bureau of Fisheries, XXVII, pp. 233-287, figs. 1-12. Washington, 1908.

Localities represented:

Calayan.

Fuga.

Luzon--

Aparri.

Manila.

Ticao.

Lubang.

Mindoro.

Sibuyan.

Romblon.

Cuyo.

Jordan, David Starr, and Seale, Alvin (A). Fishes of the Islands of Luzon and Panay. Bulletin U. S. Bureau of Fisheries, XXVI, 1906, pp. 1-48, figs. 1-20. Washington, 1907.

Descriptive list of 239 species.

Localities represented:

Luzon---

Manila.

Cavite.

Panay, Iloilo.

Jordan, David Starr, and Seale, Alvin (B). List of Fishes collected by Dr. Bashford Dean on the Island of Negros, Philippines. Proceedings U. S. National Museum, XXVIII, pp. 769-803, figs. 1-20. Washington, 1905.

Contains records or descriptions of 114 species.

Locality represented:

Negros.

Jordan, David Starr, and Snyder, John Otterbein. Description of three new species of fishes from Formosa, Bulletin Carnegie Museum, 1908, IV, No. 2. (Two of these species recorded from Cavite.

Kaup, J. J. Wiegmann's Archiv. 1858, p. 93.1

Philippine species recorded or described:

Brotulidæ, 1.

Locality represented:

Island of Soolo (=Sulu).

Kner, Rudolf. Reise der österreichischen Fregette Novara um die Erde in den Jahren 1857, 1858, 1859. Zoologischer Theil, Bd. I, Fische, 1, 2, und 3 Abtheilung, pp. 1-433, taf. I-XVI. Wien, 1865-1867.

Philippine species recorded or described:

Clupeidæ	1
Murænidæ	1
Mugilidæ	1
Holocentridæ	1
Scombridæ	2
Carangidæ	1
Trichiuridæ	1

<sup>&</sup>lt;sup>1</sup> Fide Günther, Cat. IV, 376.

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Equulidæ
                    1
Serranidæ
                    1
Lutianidæ
                    1
                    2
Hæmulidæ
Sparidæ
                    2
Sciænidæ
Sillaginidæ
Ophiocephalidæ
Scarichthyidæ
Siganidæ
                     1
Gobiidæ
                     1
Scorpænidæ
                     1
Soleidæ
                     1
```

Locality represented:

Manila.

Lacépède, Bernhard Germain Etienne. Histoire naturelle des poissons. Tomes 5 Paris, 1798-1803.

Philippine species recorded or described:

Aulostomidæ, 1.

Locality represented:

Philippine Islands.

Müller, Johannes. Abhandl. Berl. Akad., 1843, 153, 154.1

Philippine species recorded or described:

Fierasferidæ, 1.

Locality represented:

Philippine Islands.

Müller, Johannes und Troschel, F. H. Horae Ichthyologicæ. Berlin, 1845-1849.

Philippine species recorded or described:

Serranidæ

1

Pseudochromidæ 1

Localities represented:

Philippine Islands.

Manila.

- Palacky, J. Die Verbeitung der Fische. Zweite Auflage, pp. 1-239, Prag, 1895.

  Contains (pp. 228-230) a list of many species, apparently compiled from authors for the most part, and not wholly trustworthy.
- Peters, Wilhelm (A). Über lebendig gebärende Arten der Fischgattung Hemiramphus. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin, 1865, pp. 132 and 133.

Philippine species recorded or described:

Exocœtidæ, 1.

 ${\bf Locality\ represented:}$ 

Samar.

Peters, Wilhelm (B). Monatsberichte der Königl. Akademic der Wissenschaften zu Berlin, 1866, p. 96.

Philippine species recorded or described:

Hæmulidæ, 1

Locality represented:

Manila.

<sup>&</sup>lt;sup>1</sup> Fide Günther, Cat. IV, 384.

Peters, Wilhelm (C). Über die von Hrn. Dr. F. Jagor in dem ostindischen Archipel gesammelten und dem Königlischen Zoologischen Museum Übergegebenen Fische. Monatsberichte der Königl. Akademie der Wissenschaften zu Berlin, 1868, pp. 254–281.

Philippine species recorded or described:

Elopidæ	1
Symbranchidæ	. 1
Anguillidæ	1
Leptocephalidæ	1
Moringuidæ	1
Murænidæ	3
Clariidæ	2
Exocœtidæ	1
Mugilidæ	1
Syngnathidæ	5
Apogonichthyidæ	2
Ambassidæ	1
Kuhliidæ	1
Serranidæ	1
Hæmulidæ	2
Sparidæ	1
Gerridæ	1
Ophiocephalidæ	1
Anabantidæ	1
Pomacentridæ	3
Labridæ	2
Toxotidæ	1
Ephippidæ	1
Chætodontidæ	1
Triacanthidæ	1
Diodontidæ	1
Gobiidæ	13
Callionymidæ	1
Blenniidæ	4
alities represented:	

Localities represented:

Luzon.

Masbate.

Samar.

Leyte.

Peters, Wilhelm (D). Monatsberichte der Königl. Akademie der Wissenschaften zu Berlin, 1869, p. 705.

In this paper a new name is proposed for *Therapon brevispinus* Peters, 1868, from Luzon, preoccupied. (See Peters, C.)

Procé, Marion de. Sur plusieurs espéces nouvelles des poissions et des crustacés observées par M. Marion de Procé. Bulletin des Sciences par la Société Philomathique de Paris, 1822, pp. 129-134.

Philippine species recorded or described:

Tetraodontidæ, 3.

Locality represented:

Manila.

Regan, C. Tate. A Revision of the Fishes of the Family Lophiidæ. Annals and Magazine of Natural History. Ser. 7, XI. 1903, pp. 277-285.

Philippine species recorded or described:

Lophiidæ, 1.

Locality represented:

Philippine Islands.

Richardson, Sir John (A). The Zoölogy of the Voyage of H. M. S. Erebus and Terror. Fishes, pp. 1-139, pls. 60. London, 1844-1848.

Philippine species recorded or described:

Murænesocidæ

Ophichthyidæ

Locality represented:

Philippine Islands.

Richardson, Sir John (B). Report on the Ichthyology of the Seas of China and Japan. Report of British Association for the Advancement of Science for 1845, pp. 187-326. London, 1846.

Philippine species recorded or described:

Syngnathidæ, 1.

Locality represented:

Philippine Islands.

Sauvage, H. E. (A). Nouvelles Archives du Museum d'Histoire Naturelle (2me serie), I, 1878, p. 156.

Philippine species recorded or described:

Triglidæ, 1.

Locality represented:

Manila.

Sauvage, H. E. (B). Bulletin de la Societe Philomathique de Paris, (7) IV, 1880 pp. 54 and 219.

Philippine species recorded or described:

2

Gobiidæ

Blenniidæ

Locality represented:

Luzon.

Manila.

Seale, Alvin, and Bean, Barton A. On a collection of fishes from the Philippine Islands, made by Maj. Edgar A. Mearns, surgeon, U. S. Army, with descriptions of seven new species. Proc. U. S. N. M., XXXIII 1907, pp. 229-248. 131 species from Zamboanga in Mindanao, 7 of them new.

Smith, Hugh M. Notes on five food fishes of Lake Buhi, Luzon, Philippine Islands. Bulletin U. S. Fish Commission, XXI, 1901, pp. 167-171, 3 figs.

Species recorded or described:

Exocetidæ 1 Anabantidæ 1 1 Ophiocephalidæ Gobiidæ

Locality represented:

Lake Buhi, Province Camarines Sur, Luzon.

Smith, Hugh M., and Seale, Alvin. Notes on a collection of fishes from the Island of Mindanao, Philippine Archipelago, with descriptions of new genera and species. Proceedings Biological Society of Washington, XIX, 1906, pp. 73-82, 5 figs.

Species recorded or described:

alos rocordod or	40002100
Chirocentridæ	1
Dorosomatidæ	1
Engraulidæ	1
Clariidæ	1
Syngnathidæ	. 1
Mugilidæ	1

Sphyrænidæ	1
Carangidæ	4
Equulidæ	3
Ambassidæ	1
Serranidæ	1
Lutianidæ	2
Hæmulidæ	2
Mullidæ	1
Ephippidæ	1
Tetraodontidæ	1
Anabantidæ	1
Ophiocephalidæ	1
Gobiidæ	5
Soleidæ	1

Locality represented:

Rio Grande, Mindanao.

Steindachner, Franz (A). Ueber eine neue Cristiceps Art, von den Philippinen, Archivio per la Zoologia, Vol. III, fasc. I, 1864, pp. 199-200.

Species recorded or described:

Blenniidæ, 1.

Locality represented:

Philippines Islands.

Steindachner, Franz (B). Ueber eine neue Gobius-Art von den Philippinen Ichthyologische Notizen (V), Sitzungsberichte der Mathematischnaturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften. Wien, 1867, I Abth., p. 715.

Species recorded or described:

Gobiidæ, 1.

Locality represented:

Philippine Islands.

Steindachner, Franz (C). Ichthyologische Beiträge, XVI. Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften. CII, 1893, p. 230. Wien.

Philippine species recorded or described:

Gobiidæ, 1.

Locality represented:

Philippine Islands.

Vaillant, Léon. Nouvelles Archives du Muséum d'histoire naturelle. (3 serie) V, 1893, p. 57.

Philippine species recorded:

Apogonichthyidæ	1
Serranidæ	1
Pomacentridæ	1
Labridæ	2
Toxotidæ	1
Chætodontidæ	2
Monacanthidæ	2
Lahrida	1

Locality represented:

Palawan.

# LIST OF LOCALITIES IN PHILIPPINE ARCHIPELAGO.

Fishes have been recorded from the following localities by the authors named in the preceding bibliography (omitting Elera, Gogorza, and Palacky). The arrangement of the islands and provinces is from north to south, as far as possible.

PHILIPPINE ISLANDS (Bleeker; Boulenger, B; Günther; Günther, D; Heckel, A & B; Lacépède; Müller; Müller & Troschel; Regan; Richardson, A & B; Steindachner, A? B? & C).

- 1. Calayan (Jordan & Richardson; McGregor Collection).
- 2. Fuga (Jordan & Richardson).
- 3. Luzon (Peters, A & C; Sauvage, B).

Province of Cagayan:

Aparri (Jordan & Richardson).

Province of Pangasinan:

San Fabian (Evermann & Seale, A).

Province of Tarlac:

Tarlac (Evermann & Seale, A).

Province of Bulacan:

Calumpit (Peters, C).

Province of Cavite:

Manila (Bleeker; Cuvier & Valenciennes; Evermann & Seale, B; Günther; Günther, A & C; Jordan & Seale, A; Jordan & Richardson; Kner; Müller & Troschel; Peters, B; Procé; Sauvage, A & B).

Cavite (Cartier; Jordan & Seale, A).

Province of Camarines Norte:

Lake Batu (Peters, C).

Province of Camarines Sur:

Lake Batu (Peters, C).

Lake Buhi (Smith).

Lebmann River (Peters, C).

Coral reef at Mambulao 1 (Peters, C).

Province of Albay:

Legaspi (Peters, C).

Tibi (Peters, C).

Yassot River (Peters, C).

Province of Sorsogon:

Bacon (Evermann & Seale, A).

Bulan (Evermann & Seale, A).

<sup>&</sup>lt;sup>1</sup>On map, Century Atlas, Mambulao appears to be in Camarines Norte, but is not so stated by Peters.

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4. Ticao (Jordan & Richardson).
 5. Lubang (Jordan & Richardson).
 6. Mindoro (Jordan & Richardson).
 7. Sibuyan (Jordan & Richardson).
 8. Romblon (Jordan & Richardson).
 9. Panay:
        Iloilo (Jordan & Seale, A).
10. Cuyo (Jordan & Richardson).
11. Negros (Jordan & Seale, B).
12. Cagayancillo (Jordan & Richardson).
13. Bohol (Cartier).
13 (b). Panglao (Cartier).
14. Cebu 1 (Boulenger, B; Cartier; Günther; Günther, A & C).
15. Masbate (Peters, C):
        Between Masbate and Luzon (Peters, C).
16. Samar (Peters, A & C):
        Loquilocum (Peters, C).
        Lauang (Peters, C).
        Coral reef east of Lauang (Peters, C).
        Catbalogan (Peters, C).
        Basey River at Calbigan (Peters, C).
       Calbigan River (Peters, C).
17. Leyte (Peters, C):
        Tacloban (Peters, C).
        Barauen River (Peters, C).
        Lake Bito (Peters, C).
18. Mindanao:
      Zamboanga<sup>2</sup> (Günther, A; Evermann & Seale).
        Zamboanga (Seale and Bean).
        Caldera Bay at Zamboanga (Evermann & Seale, A).
        Pasananca, near Zamboanga (Günther, A).
        Malanipa, near Zamboanga (Günther, A).
        Rio Grande at Cotabato (Smith & Seale).
19. Palawan (Boulenger, A; Vaillant).
20. Balabac (Boulenger, A).
21. Sulu Archipelago:
        Jolo (Evermann & Seale, A & B).
        Siassi (Evermann & Seale, B).
        Sulu 8 (Kaup).
        Sulu Sea (Günther, after Kaup).
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<sup>&</sup>lt;sup>1</sup> Spelled Zebu.

<sup>&</sup>lt;sup>2</sup> Spelled Samboangan.

<sup>&</sup>lt;sup>8</sup> Spelled Soolo.

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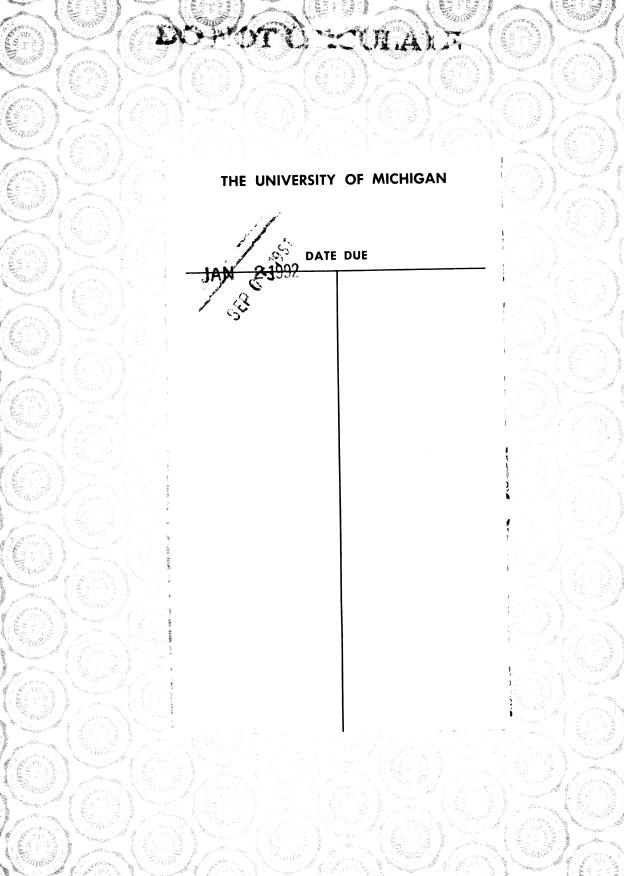
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